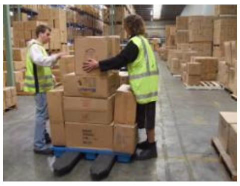
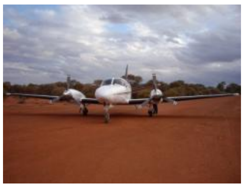
Logistics Industries

WORKFORCE DEVELOPMENT PLAN

Final Version - October 2010

Prepared by the Logistics Training Council for the Western Australian Department of Training and Workforce Development

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Please note: Statistics quoted in this document, unless otherwise stated, are sourced from the ABS 2006 census. However, these statistics are four years out of date and in some instances do not truly represent the figures that industry believes are accurate. Please refer to environmental scan for more detail.

FOREWORD

The Logistics Training Council Inc (LTC) provides high level strategic information and advice to the Western Australian Government on the vocational education and training needs and priorities of industry in Western Australia. The LTC has taken a leadership role within the logistics industries in this respect and has ensured that activities of the Logistics Training Council align with the priorities set by the Minister for Training and Workforce Development, the State Training Board and the Department of Training and Workforce Development.

This Logistics Industries Workforce Development Plan has been produced by the LTC in response to a focus by the State Government on the future workforce development needs of industry and will give Industry, Government and Registered Training Organisations an opportunity to look at what has occurred in the past and predict what will be required to move forward into the future. The Plan will also identify what the future workforce will need and how all stakeholders will be responsible for building, attracting and retaining the workforce to meet industry's future skill needs.

A major challenge for the LTC is to make industry and workers value training, especially through higher order qualifications. The traditional image of the transport and logistics industry has been one of physically demanding jobs, heavily industrialised workplaces, and an employment destination of last resort. Today, this couldn't be further from the truth.

Transport and Logistics in 2010 is a technologically advanced, dynamic and vibrant industry, with a diverse range of career options, and a highly skilled and professional workforce. The industry has not only embraced new technology but has delivered significant national and international productivity improvements through the integration of new and emerging technologies across its sectors.

In recent years there have been many attempts to quantify transport and logistics workforce numbers. In the main, existing government data relies on definitions of direct employment wholly within a transport and logistics enterprise (ie truck driver working for a freight company). While it is acknowledged that many other sectors of the economy including mining, agriculture, retail, construction and government undertake transport and logistics activities, these employees are not included in government estimates of the entire transport and logistics workforce.

The consequence of this situation is a significant under-reporting of the number of individuals who participate in the transport and logistics workforce. The potential impact of this under-reporting is insufficient focus, particularly at policy level, on the magnitude and composition of transport and logistics skills required to service the Western Australian economy.

It is the intent of this Workforce Development Plan to capture rich data and information that can be used to identify current and future skills and training needs for all transport and logistics industries. This document is a vibrant and ever-changing account for use by Government, training organisations and industry, and we look forward to it becoming the benchmark for future research.

The Logistics Industries Workforce Development Plan has been supported by the 2010 Logistics Environmental Scan, and both documents will be placed on the LTC website and will become dynamic documents that will reflect the changing industry environment.

I commend this Plan to you and look forward to seeing positive outcomes as a result of its recommendations.

Thierry Tedeschi
Chairperson
Logistics Training Council Inc

STRATEGIC ENVIRONMENT

The transport and logistics industries have undergone significant change in the past three years. In 2007 the industry was experiencing boom conditions, and as a result significant constraints were evident in terms of the degree to which existing transport infrastructure could support the country's transport requirements. More recently the effects of the global economic crisis slowed activities in the transport industry, and this has created issues relating to long term labour capacity, and the bleeding out of the current industry workforce into other industries sectors. However, a raft of new projects, especially in the oil, gas and mining sectors has seen the demand for transport and logistics once again at the forefront.

The Australian Bureau of Statistics states that there were nearly 68,000 people employed in WA in the Transport, Postal and Warehousing sectors in August 2009, with the latest figures expected to show an even greater increase as the industry prepares itself for future growth.

With many new mining, oil and gas, and infrastructure projects planned in Western Australia over the next three years, pressure will be placed further on the Transport and Logistics sectors. Attracting new entrants has been a problem for many years, and the attraction will be in more high paying occupations, which could put the industry back into the same situation it was in through the last period of sustained economic growth.

The global economic crisis has however provided a window of opportunity through which organisations have sought to restructure and re-augment their business processes in anticipation of an upswing in the global business environment. The businesses that are most vulnerable in the current business environment are those that have lost major transport contracts or have been limited in their capacity to carry out business due to supply chain blockages or infrastructure constraints.

There has also been a series of infrastructure projects either approved or in the pipeline, including the upgrade to Perth Domestic and International Airport Terminals, as well as upgrades to a range of regional airports to meet the growing demand for fly in/fly out (FIFO); upgrade to existing ports and the building of new ones, eg Oakajee; and proposed new railways to transport more ore to ports in the North West.

Industry has diversified its operations to sustain its business practices. This has prevented redundancies and allowed employers to maintain their existing workforce. Some businesses that commenced operation during the boom have closed as a result of poor business practices, lack of business experience and lack of reserves to ride out the economic downturn. However, there have been many who were able to consolidate successfully and they are now preparing for the new period of economic growth in a stronger position than they felt faced them a year ago.

A recent development by Rio Tinto has been the opening of a new high-technology, purpose-built Operations Centre alongside Perth's domestic airport. The Operations Centre is now the primary control centre for Rio Tinto's vast network of mines, rail systems, infrastructure facilities and port operations in the Pilbara, and features 200 controllers and schedulers and more than 230 technical planning and support staff, who control operations up to 1,500 kilometres away.[1]

The main sectors within Transport and Logistics are: Road Transport, Aviation, Maritime, Stevedoring, Warehousing and Logistics, Freight Forwarding, Rail Transport and Postal.

For more detailed information on any of our industries, please go to the Environmental Scan, which can be found on our website: www.logisticstc.asn.au.

Road Transport

Road transport is divided into freight and passenger services. Freight services include all transport companies involved in transporting any type of freight by road; delivery services and furniture removal services via road, truck hire with driver and taxi truck services with driver. Passenger services include coaches, buses, taxis, limousines and small charter vehicles.

The road transport industry employs approximately 167,000 truck drivers nationally, with nearly one quarter working in WA, and has the largest and heaviest road-legal vehicles in the world[2]. WA is the fourth largest State for employment of road transport workers. With the amount of freight moved expected to double in the next ten years[3], it is imperative that the skills demands for this industry are met.

Although large national companies dominate the road transport industry, there is a high percentage of owner drivers and small to medium enterprises. 95% of the road transport industry in WA is intra-state[4]. Perth is the major hub of the industry with many companies concentrated around the Kewdale, Welshpool and Canning Vale areas. There are numerous depots at major rural centres throughout the State, particularly in the North West, due in part to the mining boom, and a high percentage of north/south travel as well as east/west travel.

Transport, postal and warehousing industries are still the largest direct employers of road transport workers, but these workers can be found in nearly every other industry area. This means that a skills shortage of road transport workers in one sector will have a flow-on effect to all other sectors.

Transport drivers originate from a broad cross-section of industries and as a result many have other skills that can be applied across a range of occupations. Working conditions in the industry have remained relatively constant throughout the past 18 months and the industry will find it faces the same labour attraction challenges in an improving market as it did prior to the economic crisis, and resources sector downturn. If an improvement in the business market is intermittent it is likely that more sub-contracting driving roles will be created in the industry as a means of insuring business owners against staff surpluses in a volatile business environment.

Major labour challenges will exist in the capacity of the industry to find new drivers once the economic climate improves. The biggest issues facing the road transport industry are an ageing workforce and the lack of experienced and/or qualified staff (eg drivers).[5] More than 65% of truck drivers, delivery drivers and freight and furniture handlers have no post-school qualifications, while those who have received training have mainly been at the Certificate III and IV level.[6] This reflects the relationship between licencing requirements and the new training package qualifications that are aligned to them at these levels.

Overseas trade has slowed down to 2008 levels, however it is expected that a future increase in overseas trade will result in increased road traffic in and out of the port, particularly in relation to containerised transport. This will exacerbate the traffic problems currently experienced in and out of the ports.

The road transport industry is heavily regulated and transport operators must be accredited by Main Roads WA. Bus and coach transport is governed by the Omnibus Standards Scheme and co-regulated by the industry and the Department of Transport.

Taxi services are governed by the Taxi Act 1994 and country taxi services and omnibus services are governed by the Transport Coordination Act 1966 (and subsequent legislation). The Passenger Services Business unit of the Department of Transport regulates the taxi, country taxi and omnibus industries.[7]

A national heavy vehicle driver licensing scheme to include a national competency framework governing the licensing of heavy vehicle drivers around Australia has been proposed by the Australian Transport Council (ATC). The framework will encompass a consistent approach to training and assessment of heavy vehicle drivers and regulation of heavy vehicle driver trainers and driving schools. Work on this initiative is being progressed by a sub-committee of Austroad, the Heavy Vehicle Driver Competency Working Group (HVDCWG). A project plan for this was approved by the Registration and Licensing Taskforce in May 2009; and a project "document" setting the proposed parameters of the National Heavy Vehicle Drive Competency Framework was endorsed by RLTF in August 2009. National level stakeholder consultation has been completed; written submissions have been received from industry stakeholders and face-to-face forums have been conducted in all jurisdictions. Stakeholder feedback is strongly supportive of the directions being proposed by the (HVDCWG).[8]

The average age of workers for all occupations except freight and furniture handlers is over 40, with bus and coach drivers being the oldest, at 53 years. Male workers dominate all occupations, with female participation well below the national average, while male participation is well above the average.[9]

On average, workers entering the road transport sector are older (between 35-40 years), which will leave the industry with an ageing demographic, and not enough workers to replace them.[10] This is partly due to licencing, regulatory and insurance issues which remain the greatest barriers in employing young people in this sector. Progression through the licences can take up to three years to attain a multi-combination (MC) licence, and there have been major difficulties with insurance companies to insure drivers under 25 years. Discussions are currently being held with the Australian Trucking Association (ATA) and other peak bodies for movement through licences to occur at a faster rate. The major insurance companies are also preparing to amend their policies regarding insurance for under 25 year olds.

Many companies have streamlined their operations following the economic crisis in a bid to remain competitive.

Government initiatives to seek a greater percentage of containers on rail from metropolitan locations to the Fremantle Inner Harbour will reduce road congestion, particularly at the port. Whilst there will be reduced heavy haulage of containers by road, it is expected that this will not have a major impact on the road transport industry. Rather it will shift truck transportation patterns to intermodal terminals rather than travelling direct to port. Containers are subsidised at $45 per Twenty Foot Equivalent Unit (TEU) for transportation to the port by rail. Currently about 11 % of containers to the Fremantle Inner Harbour from the Kewdale area travel by rail.[11]

The introduction of a national heavy vehicle regulator by the Federal Government is aimed at streamlining the regulatory requirements for operators, reducing business costs and improving efficiency. Currently each State and Territory has a different set of heavy vehicle regulations, making compliance difficult for interstate transport operators. Taking into account the distances and remoteness experienced in WA, a range of measures is being pursued by the WA Department of Transport and Main Roads WA NHVR Project Team to ensure that WA's industry and regulatory benefits are protected and loss of benefits are minimised. WA is of the view that WA's state-based occupational health and safety legislation caters sufficiently for management of driver fatigue. The National Heavy Vehicle Regulator, which will be based in Queensland, is expected to be operational by 2013.[12]

Heavy vehicle charges levied by the Government have increased in recent years due to high spending on major roads. Trucks and buses pay road and bridge costs through a two-part federal fuel-based charge and state-based registration fees.[13]

There has been increasing use of technology in all areas, including vehicle tracking systems and the use of GPS, on-board communications and computer systems, computerised dispatch system for taxis etc, as well as changes to the size and configuration of trucks, increased horsepower and wider use of B-double and multi-combination vehicles. Such vehicles will include Euro fourth and fifth generation trucks which are very cheap to run and super B-doubles which are higher productivity vehicles which, if approved by the government, will reduce the number of vehicles on the road. However, there are still many older trucks on the road.[14]

Road transport is the largest source of Australian transport Coal and greenhouse Gas (GHG) emissions, accounting for 89% of sectoral emissions in 2008. While aviation emissions are growing faster than those from road transport, the road transport contribution is so dominant that it is still projected to account for 88% of Australian transport emissions by 2020[15]. Identified areas of environmental awareness include fuel usage, carbon emissions, fuel leakages, land and terrain damage. There is an increasing awareness of the importance of sustainability in the transport industry. In 2009 the Australian Trucking Association, with the support of the Australian Government, produced an Environmental Best Practice Guide for the Trucking Industry. In 2009 the TLISC ran a series of sustainability workshops around the country. The outcomes of these workshops and supporting surveys have been published in the Green Skills Report which documents the research, development and implementation of additional environmental and sustainability units. In late 2010 the Department of Environment and Conservation will release a program aimed at improving air quality by reducing vehicle emissions. The ideal target audience is heavy vehicle fleets such as transport companies, public transport providers and local council fleets.

The booming economy and increased migration has led to a surge in population and a rise in demand for consumer goods. This has put huge pressure on existing infrastructure and increased the number of heavy vehicles on the roads, resulting in traffic congestion and bottlenecks, particularly in areas en route from the freight hubs of Forrestfield and Kewdale to the Port of Fremantle (eg Leach Highway). Many motorists feel intimidated when sharing the road with these vehicles, and complaints from the public regarding the driving behaviour of heavy vehicle drivers have resulted in a negative view of the industry. It has also been reported by many heavy vehicle drivers that a percentage of motorists appears inexperienced and uneducated in interacting with large vehicles.

The long distances travelled by many freight operators have resulted in a dislocation of family life and management of family responsibilities due to time away from home. Due in part to an increase in the number of tourists travelling in WA, there is a major issue regarding inadequate rest areas and facilities in rural areas, which are being utilised by the general public. This is compounded by the fact that vehicles carrying dangerous goods are not allowed to park within a set distance of other vehicles, which restricts their access to many overutilised rest areas. These factors, coupled with poor wages in some case, result in diminished job satisfaction, fatigue and high rate of turnover of staff.

Freight Forwarding

Road

This class consists of units mainly engaged in contracting to transport goods and using one or more different enterprises to perform the contracted services by way of road freight transport. (In these cases the `forwarding' unit takes on prime responsibility for the entire transport operation, specified in each contract, for a charge or fee which covers the total transport operation and, in turn, pays the actual carriers for the transport services rendered to it.) Express freight services account for approximately 50% of this service followed by general freight services, distribution services, customs brokerage and compliance and warehousing.

Rail, Air and Sea Freight Forwarding

This industry consists of units mainly engaged in contracting to transport goods for other enterprises, and using one or more different enterprises to perform the contracted services by way of rail and/or air and/or sea freight transport. (In these cases the `forwarding' unit takes on prime responsibility for the entire transport operation specified in each contract for a charge that covers the total operation, and in turn pays the actual carriers for transport services rendered to it.) Rail freight forwarding accounts for approximately 40% of this service, followed by sea freight forwarding and air freight forwarding.

Aviation

Aviation is a critical mode of transport in Western Australia, servicing isolated population centres, vast resources operations and important tourism facilities. A variety of issues need to be addressed when considering aviation needs in WA and therefore workforce development. Workforce development will be required for aviation industry personnel available to provide WA populations with regular passenger transport services through the provision of industry personnel for the growing resources sector and resource operations in particular to move their fly-in/fly-out staff from population centres to a mining site. [16]

The vision of any aviation workforce development strategy should be aimed at developing a dynamic and sustainable passenger air transport system to meet the existing and future social and economic needs of Western Australian and other travellers.

Recent figures released by Tourism Western Australia indicate that between March 2009 and March 2010 Perth Airport recorded a 9.8% increase in the number of intrastate travellers to 2,431,701; a 1.8% increase in the number of interstate travellers to 4,919,371 and a 7.5% increase in the number of foreign national travellers to 1,399,855. Intrastate passenger numbers have also grown at Broome airport during the past 12 months by 6.3%. There has also been an increase in the number of interstate fly-in/fly-out workers, and this growth is a reflection of business growth within the State.[17]

The aviation industry is global in its activity and in its nature. Downturns are often characterised by the movement of pilots to local or offshore destinations where work can be found. The economic downturn has caused a reduction in the use of air transport, primarily for international carriers, with Qantas and other airlines reducing some staffing levels. While pressures remain around airline profitability it is possible that outsourcing of some airline support functions may be initiated - this will have an impact on attraction and retention strategies for airlines. The continued mining and oil and gas exploration in WA has seen local airlines continuing to operate at high levels, although some have experienced periods of slow growth. Many companies have diversified their services to survive the downturn.

Although some regional airlines are experiencing record profits, others are struggling in an increasingly competitive marketplace. It is in these businesses that Australian trainee pilots gain flying hours as a means of moving up the hierarchical flight ladder. Seasonality in some regional areas, especially those relying on tourism for work, means that pilots need to travel to find the work. In an environment where these opportunities are limited it is likely that Western Australia will have a glut of pilots with underpinning qualifications but with limited capacity to find the requisite flying hours to engage fully in the industry. However, the new State development projects planned for WA will see an increased need for fly-in/fly-out workers, so as long as the pilots are available this need may be met.

Flight instructor quality remains an issue as newly qualified pilots become instructors to increase logged flying hours and senior instructors are lured back to the industry by regional and mainline airlines.

The International Civil Aviation Organisation (ICAO) has predicted that more than 800,000 new pilots and engineers will be required globally to meet the needs of the expanding international commercial fleet of planes, with more than double the current fleet expected to be purchased in the next 20 years. ICAO believes the following factors will lead to the predicted shortage of skilled aviation professionals: retirement of the current generation of workers; failure to attract suitable people; competition from other industries for workers; lack of training capacity; and lack of international harmonisation of some aviation competencies.[18]

Total air passenger movements in Australia and globally are projected to nearly double by 2025–26. Perth Airport is expected to experience annual growth of 4.7%, the second highest in Australia. This forecast level of growth calls for a significant increase in airline capacity and infrastructure at capital city airports. The major airports are already planning ahead and are in the process of implementing measures to cope with increased future capacity. It is anticipated that growth will occur through increased international traffic, although the major resource projects in WA will certainly be a major part of their growth. This will include increased fly in/fly out (FIFO) from the Eastern States.

Perth Airport is the major airport for the State, servicing both domestic and international travel. There are a number of airports at major regional centres, and these are administered by local councils or private corporations. Workers at regional airports are more multi-skilled than their city counterparts, and tend to work only when public planes are scheduled, with many having more than one job. Environmental concerns are high on the priority with animal and bird hazard control being uppermost.

Perth Airport has commenced initial stages of a $1 billion redevelopment project to build a new intrastate terminal that will boost capacity for domestic services to remote resource areas. This involves building an aircraft parking apron capable of holding up to 36 aircraft to service the future terminal. However, there has been no increase in runway capacity, and with peak periods at their maximum capacity due to FIFO, there will be restrictions placed on the movement of air traffic which will impede future growth. Air traffic management is being undertaken to relieve this pressure, and the development of new FIFO airport hubs in Geraldton, Kununurra, Port Hedland and Kalgoorlie will also be vital. There may also need to be planning for a second Perth Domestic/International Airport, but this is conjecture at this stage.

The forecast growth in air traffic calls for a coordinated response to improve landside transport links between airports and city centres in order to facilitate future increases in passenger movements to and from airports, eg improved public transport and roads. There are also concerns regarding the management of increased aircraft noise over the metropolitan area.

Passenger travel accounts for more than 80% of effort in the aviation sector, with freight and postal making up the remainder. Airlines that provide scheduled domestic air transportation of mail on a contract basis are also included in this industry.

Note: Air freight is characterised by goods that are time sensitive or highly valuable, ie cash, mail and medical supplies.

Stringent regulatory requirements exist for this industry sector. The major regulator is the Civil Aviation Safety Authority (CASA), which operates under international guidance from the ICAO. The Federal Government Department of Infrastructure, Transport, Regional Development and Local Government, and the WA Department of Transport are also heavily involved in regulation for the aviation sector. Changes to regulations are impacting on the needs of regional airports including increased reporting officers, the need for greater use of security screening of passengers and baggage checking equipment.

Pilots and air traffic controllers have a very large male cohort, especially when compared to females and the all-occupations average. Conversely, there are a large number of females operating as flight and check-in attendants, although there are proportionally more males entering the sector. 75% of all pilots and air traffic controllers are full-time, while this applies to only 65% of flight attendants. This may be due to the high female cohort who are traditionally more active in the part-time workforce.[19]

There is an ageing workforce in all aviation occupations, particularly amongst helicopter pilots, flight instructors and commercial airline pilots[20] (please refer to environmental scan).

With the increase in international air travel, skilled personnel (particularly pilots) are being lured to overseas airlines and airports. This has created a demand for training additional to projected domestic labour requirements, and increased competition from other carriers. Australia's large, relatively clear airspace, especially in WA, has attracted the international student training market, placing further pressure on domestic training availability.

The need for improved air cargo and passenger security arrangements sparked by increased global terrorist attacks has also had major implications for additional security training for staff and increased training for existing personnel.

The Government's plan to encourage international airlines to increase services to Australia's secondary international gateways will give the regions further potential to grow their inbound tourism markets. By providing airlines which serve regional airports with greater access to the major gateway destinations of Sydney, Melbourne, Brisbane and Perth, the Government will provide further incentives to airlines to better service destinations such as Cairns, Darwin and Broome. [21](White Paper December 2009)

In April 2010 the Department of Transport released its new Intrastate Aviation Framework for Western Australia. The key features of this framework are:

- all currently deregulated airports will remain deregulated;
- Geraldton will become deregulated;
- existing regulated Regular Public Transport (RPT) air services offered through the Coastal Network, Northern Goldfields Network and Kimberley Subsidised Air Service will be broken up and offered through a Request for Proposal (RFP) process; and
- charter services on regulated air routes will continue to be limited to one service per client per calendar week (Monday-Sunday).

This means those airlines that have provided the service on regulated routes in the past will need to re-apply, while smaller airlines and charter companies that had hoped to access these regulated routes in the future have still been restricted in their access.

The Government plans to harmonise civil and military air traffic management, and develop a joint operational concept, which will offer significant improvements in safety, efficiency and capacity (White Paper December 2009).

The large volume of fly-in/fly-out workers in the State has had a huge affect on the airlines, particularly those flying to the North West, with numbers estimated at 70 flights per day and growing as the volume of workers is expected to grow to approximately 7,000 workers. Similarly the volume of migrants settling in Perth has affected all airlines flying in and out of WA.

Training is primarily delivered to meet regulatory requirements. The bulk of training is delivered on the east coast; however commercial pilots are trained in WA. Public funding is available for the theory component of the Commercial and Air Transport Pilot's Licence, whilst students fund practical training.

Flexible delivery and distance learning are important for this industry. Through the State Government's Regional Airports Development Scheme (RADS) funding is provided to regional airport owners/leaseholders on a case by case basis to assist in developing airport infrastructure to encourage aviation training in regional WA. In the RADS funding rounds of 2009-10 and 2010-11 more than $2.28 million has been granted to the Shire of Wyalkatchem towards airport infrastructure works to develop aviation training at the Wyalkatchem Airport.

Maritime

The maritime industry has been profoundly affected by the global economic crisis. In WA where over 95% of imports and exports are transported by sea any shifts in global trade will impact on shipping and associated industries. Limited on-board places for the training of seafarers has become more pronounced due to a severe reduction in the movement of ships in and out of Australian waters and the significant increase in wages growth in Australia, making Australian shipping uncompetitive. The significant reduction in the number of Australian-owned ships over the last decade has contributed to the limited number of seafarer training positions on board Australian ships. Ship owners globally continue to register ships in ‘ports of convenience’ and, in most cases, source sea faring labour from those regions.

There is a general shortage of workers in the industry due to a previous lack of commitment from the industry to train; an ageing workforce and a significant increase in the work available. The maritime sector is a very male dominated industry, with more than 90% of workers male.[22] This stems from a long history of men at sea, with women not entering many maritime professions until the last few decades, when accommodation on vessels was more conducive to a female presence.

Whilst Australian-trained maritime officers and engineers are still sought after internationally, the provision of integrated ratings and other able seamen is often driven by shipping agents seeking to gain the best competitive position by using overseas labour. This is not deemed acceptable for many within the sector, as it does not place Australian marine professionals as the employees of choice. There is also expected to be a shortage of marine pilots as the shipping industry picks up.

The Australian maritime industry is subject to regulation by the Australian Maritime Safety Authority (AMSA), individual state marine authorities, with the international systems regulated by both AMSA and the local authorities. AMSA is currently rewriting Marine Order Part 3 to include what has become known as AMSA’s Tinny to Tanker plan (T2T). The most significant change will be to extend the AMSA suite of STCW certificates into the near-coastal area. These proposed new STCW near-coastal certificates will include combined trading and fishing certificates, for smaller craft. They will be STCW and STCW-F compliant certificates. It is intended that all AMSA certificates issued under the new Marine Order Part 3 will be readily acceptable in all Australian States and Territories, as is required by the Council of Australian Governments (COAG). The backbone of the proposed new certificate structure is the Transport and Logistics Industry Skills Council Maritime Training Package which under the Australian Quality Framework allows for distance education and recognition through AMSA’s system of AMSA-approved Registered Training Organisations. There has also been a proposed rationalisation of sea time which will ensure more people are able to achieve the outcomes as required.

It is hoped by AMSA that T2T will sit within the proposed new Single National Maritime Jurisdiction (SNJ) that is currently under discussion by COAG. Implementation of T2T was scheduled to occur by mid-2010, but this has been delayed while more consultation occurs, particularly at the lower level certificates of competency.

Shipping accounts for 99% of Australia’s international trade. In 2008-09, WA handled more than half of the nation’s total trade tonnage. Approximately 40% of activity in the offshore marine (oil and gas) sector is based in WA. The sector employs approximately 2,500 staff hired directly to the vessels operating in the area and supports more than 10,000 staff in affiliated areas. Generally, the offshore sector is more highly paid, with the issue being that regulations prevent the ability for staff to move around the industry. This is due to different licences being required for different sized vessels, with little if no current recognition for the depth of work being carried out by the marine professionals.

Eight multi-user port authority ports and eight non port authority ports, which for the most part, contain port facilities dedicated to the export of a single commodity by a single operator, are located along 12,500 kilometres of the Western Australian coastline. They handle over 4,000 international trading vessels plus thousands of interstate, intrastate, fishing and recreational vessels every year.

The Port of Fremantle is the capital city port of WA and handles 83% by value of WA's seaborne imports and 25% of WA's seaborne exports, whilst Port Hedland and Dampier are amongst the highest tonnage ports in the world. There is expected to be a significant growth in ports with the planned new facility at James Price Point; the Oakajee Project; expansion of the port at Port Hedland; port development at Cape Preston, about 70 kilometres south west of Dampier; Mount Anketell, which is located within Port Walcott; Ashburton North, which is within the Port of Onslow and the Gorgon gas project on Barrow Island.[23]

Nearly two thirds of deck and fishing hands work in the fishing industry[24], yet there is expected to be a shift towards the maritime sector within transport as the demand for workers in the oil and gas offshore sector picks up.

WA is the third largest employer by State of marine transport professionals, while WA follows only Queensland for the employment of deck and fishing hands.[25] This could change as a renewed freight effort is occurring and the fishing industry drops off to be replaced by the increasing demand from the offshore sector for skilled maritime workers.

Predicted strong demand for seafarers arising from new investment in offshore oil and gas projects will also intensify the need for qualified personnel. It is anticipated that most of this training will occur at the new entrant level, with upskilling of the existing workforce following current trends. However, access to sea time will still be a major barrier to the successful training of workers, and a greater focus on simulation will need to be investigated.

Major growth is predicted in coastal marine occupations, particularly marine tourism, chartered vessel operations, public ferry transport, coast guard and emergency services and marine services to the oil and gas industry, as well as increases in the size and complexity of vessels. Sea transport will become more widely used within supply chains involving significant distances, eg multimodal freight transport. This will be to offset the high cost of freight movement through other modes, and there has already been an increase to the depth of Fremantle Port to allow for larger vessels to enter the harbour.

Offshore oil and gas exploration and production companies are the largest employers within the marine transport sector and there is expected to be an upturn in work within the next 12 months, which will put significant pressure on the need for continuing training during a period where space to do so is extremely limited. Significant shortages are expected over the next few years, and these will be difficult to fill due to the long lead time to produce professionals, eg three to four years.

Training is predominantly driven by regulatory requirements. International and coastal shipping have a very strong culture of training, while the ferry and charter boat sector does not have a strong training culture except to meet regulatory requirements. As the Regulator oversees the training that is delivered, there has occurred a disconnect between the training and the national training package that services the sector, with many State differences occurring. This has led to many state-based courses being delivered against the regulatory requirements. Currently, work is being done to harmonise the qualification system, as the current training package does not address job roles or occupations and the regulators and training package developers are in discussion to align qualifications to licences across Australia. This is all part of the T2T Project, and it is hoped that as the Marine Orders 3 are implemented, the qualifications system will align perfectly with them. This should be completed by 2011.

The ability to move towards a more flexible model that allows for recognition of prior learning will be vital for the industry. T2T will also have a major impact, as the new alignment to maritime training package qualifications will see more workers attaining qualifications as they progress through their regulatory requirements which will be aligned to the training package.

Stevedoring

Around 6,000 stevedores/dockside workers are typically employed in Australia, many on part-time and/or contracted arrangements. The two major stevedoring companies operating in WA are Patricks and DP World.

Stevedores used to be the supervisors of dockside workers with unskilled labourers performing the bulk of the tasks. Now the stevedoring industry is comprised of highly skilled workers at different levels, performing a variety of tasks that revolve around the loading and unloading of cargo to and from ships.

There has been a sharp reduction of stevedoring services required to service a smaller maritime activity. This has seen many employees, who are not fully employed by the stevedoring companies, with severely reduced hours or none at all. Significant gains have been made in recent years in the time required to load and unload containers in the ports; this has been brought about largely through the implementation of world-class dockside loading technologies.

Traditionally there has not been a lot of training for stevedores. There is also difficulty in accessing training in the North West as registered training organisations in this field are based in Melbourne.

The marine cargo handling industry provides the service of loading and/or unloading cargo from ships (provision of labour only). This involves both crane (approximately 70%) and non-crane operations (approximately 30%).

The primary activities of companies in this industry are ship loading or unloading service (provision of labour only) and stevedoring.[26]

Water transport terminals consist of units mainly engaged in the operation of ship mooring facilities or passenger or freight sea transport terminals (including sea cargo container terminals and coal or grain loaders) used for the loading or unloading of vessels.

Port operations are mainly engaged in the maintenance and leasing of port facilities to facilitate the land-sea transition of goods and passengers, and include wharf provision and wharf facility leasing.

Services to water transport involve operators who provide navigation services, towage services, and other services to the water transport sector, eg towboat and tugboat operation, harbour and port services (other) and lighterage service.

The impact of technology is being felt in stevedoring in Australia. In Brisbane, Patrick's groundbreaking project, the world's first automated straddle carrier (AutoStrad) terminal, is now servicing all Patrick container volume. The automated 10 metre high, 65 tonne straddle carriers are fitted with sophisticated motion control and navigation systems which allow them to operate unmanned – moving and stacking containers from the quay into holding yards and onto vehicles and back to quay cranes with pinpoint accuracy. There has been strong indication that this type of automation will move to other ports throughout Australia within the next few years.

Rail

The rail industry is made up of freight companies that operate or hire railways for the transportation of freight, terminal or depot facilities for receiving, dispatching or transferring rail freight or cargo, or in providing services allied to railway transport; and companies operating railways for the transportation of passengers. Railways consist of heavy rail (large trains using dedicated rail tracks over long distances) and commuter travel (large trains using dedicated track over short distances), but exclude tramways and monorails.

Like most other industry sectors, the rail industry in WA is driven by supply and demand pressures which in turn are dependent on State and national economic circumstances, as well as the status of their suppliers and competitors. New rail infrastructure projects, specifically to service the mining sector in the regions will see an increased demand for all rail workers. These include train drivers, train controllers and engineers which are currently being sourced from overseas. These positions are in high demand in the mining sector where high salaries are being paid for already trained workers. Other factors affecting this industry are the world price of energy and crude oil, an ageing workforce and the tourism industry. It is anticipated that nearly a quarter of the workforce will retire in the next decade. It has also been noted that there is a great shortage of tradespeople in this sector, particularly mechanical and electrical fitters.

Significant increases have been witnessed in the use of rail and bus patronage especially in metropolitan areas, which has placed significant pressures on bus and rail transport systems including the capacity to attract the required volume of personnel to work in these sectors. The industry is characterised by a relatively small number of very large organisations, with the remainder categorised as small to medium enterprises.

Railway owners and operators (freight and passenger) are regulated by the Office of Rail Safety and WorkSafe WA.

The introduction of a national rail safety regulator by the Federal Government will have a huge impact on the rail industry. The regulator will administer a single national Act, the Rail Safety Act, which will encompass all aspects of rail safety such as operations, track management, equipment standards, hours of work, fatigue and worker health and will be based in South Australia.[27]

The State Government's plan to invest $30 million in WA's grain freight network to fund urgently required rail maintenance work on the Avon to Albany line; and develop a scheme designed to make transporting grain by rail cost-competitive in the Kwinana South Zone will have a positive impact on the transport of grain by rail, which has slowly seen an increase in the amount of grain being transported by truck in recent times.

The WA Government has approved a $7.2 billion plan to develop a 300 km rail line connecting the Roy Hill mine, about 110 km north of Newman, with port infrastructure. Construction of the railway line connecting the mine to port facilities will now proceed, subject to rail safety accreditation being achieved.[28]

The industry relies on a vast range of technologies for rolling stock, communications, track work, signalling, business and customer service which will be paramount to meet the increasing demands over the next thirty years and beyond.

Mining giant Rio Tinto announced in 2008 that it will operating driverless trains on most of its track that services the Pilbara within five years, However, there is a belief within the rail sector that this will not happen as soon as predicted, due to the high risk associated with driverless trains, especially in the mining sector.

Over 40,000 men and women are employed in diverse occupations in rail throughout urban and regional Australia. Many more people work in supporting industries providing goods and services to the industry.[29] The industry is very male dominated – Western Australia has only 8% women in its workforce, with the national average being 15%.

Rail in WA consists of 5,100 km standard, narrow and dual gauge network in the south west managed by WestNet Rail; the Electrified Urban Passenger Network managed by the Public Transport Authority, the interstate standard gauge line from Kalgoorlie to Adelaide which is owned by the Australian Rail Track Corporation and the rail lines in the Pilbara which are privately owned and built, managed and maintained by the mining companies.[30]

WA is one of the major employers of train drivers, due mainly to the mining sector. This demand in WA will increase as more rail lines become operational, and the Southern Grain and Timber Tracks are brought back on line.

Rail is considerably more energy efficient than road transport, therefore reducing Australia's dependence on oil imports. Rail line haul freight movements by rail are three times more energy efficient than moving the same freight by truck. Passenger rail is about seven times more efficient than cars for city commuting. Rail is approximately eleven times more efficient than trucks for transporting bulk freight and about three times more efficient for other freight.[31]

Training in this industry has traditionally been on a needs basis. The industry is heavily regulated, with qualifications linked to regulatory requirements, which is where most training has occurred. Regulation requires that railway owners/operators have the competency and capacity to manage railway operations safely. The industry has not perceived a need for training at the higher levels for many of its workforce.

The current method of delivery of operational and entry level training is primarily through on-the-job training with some off-the-job or off site training for generic skills. Opportunities exist for entry and operational level training through traineeships. Funding of traineeships for all rail qualifications and the full implementation of the Productivity Placements Program with further enhance the availability of training opportunities within the industry.

The industry sees a need for cultural changes at company and industry wide levels, via communication, involvement and participation, to create long-term sustainability of the industry.[32] It is looking at developing initiatives for more flexible working arrangements and higher levels of diversity in the workplace, which includes increasing the number of women in the workplace.

Warehousing and Logistics

Warehousing and logistics play a pivotal role in the transport and supply chain and logistics management. Logistics is an integrated approach to transport, storage and distribution of goods aimed at ensuring that the right products reach the right place in the right quantity at the right time to satisfy customer demand. There are more than 210,000 store persons in all industry sectors in Australia according to recent statistics.[33]

Warehouses have developed into high-tech distribution centres which are virtually paperless and use the most sophisticated equipment, including conveyor picking and packing processes, voice activated systems and systems which can scan and track goods anywhere in the world.

Warehousing is one of the primary battlefronts in competition between some of Australia's biggest companies in reducing costs and the prices consumers pay and therefore increasing profits.

This industry provides third party storage or warehousing services excluding grain storage. The storage activity can be under contract arrangements which may include distribution or on an ad hoc basis such as self-storage. Warehousing services can be private or public, but both services attract a fee for storage of goods.

General warehousing accounts for more than half of all warehousing, with cold storage to a lesser extent; and bond storage, distribution services and self storage accounting for the remainder.

Structural changes are occurring in warehousing and distribution linked to the growth in e-commerce and increasing vertical integration and supply chain management across retailing, warehousing and distribution organisations. Entry level positions are some of the most difficult to fill and return due to the perceived low pay rates and lack of understanding of potential available opportunities.

Occupations in this industry include storepersons, transport and despatch clerks, purchasing and supply logistics clerks, forklift drivers and supply and distribution managers.

Warehousing is the least regulated of all the transport sectors, with forklift driving and dangerous goods being the two areas of major focus.

Across all occupations, warehousing is a male dominated workforce. Female participation is highest in office based roles, such as purchasing and supply logistics clerks. Warehousing workers are spread across a variety of industries.

There has been an emergence of third party logistics (3PL) providers who provide a one-stop shop service to customers and typically specialise in integrated operation, warehousing and transportation services that can be scaled and customised to customer's needs based on market conditions and the demands and delivery service requirements for their products and materials.

Other factors include the resurgence of regional warehousing to reduce transportation costs in light of oil prices, particularly in the food industry, and the increased use of the internet and low cost of products from countries such as China, which have resulted in a huge surge in direct marketing.

Modern warehousing systems are highly information technology reliant and a growing part of this sector requires individuals with a knowledge and understanding of information technology systems and systems management. New technologies such as the use of logistics management technology and systems, including freight tracking systems, electronic data interchange systems, electronic data interchange system, supply chain management systems, on-board communications and control systems and portable and automated label recognition systems, are constantly evolving. The automation of the picking process requires less staff, which can result in redundancies, and many companies are exploring this option.

A recent survey conducted by the TLISC indicates that companies are still coming to terms with the question of sustainability. Warehousing facilities have the largest potential in terms of reducing the environmental impacts, with green building or energy efficient buildings and supply chain influences being targeted in addition to ensuring all employees using the facilities were trained in using them efficiently, especially in relation to company purchasing strategies.

Traditionally warehousing has been considered an unskilled area, however, the introduction of traineeships and qualifications pathways have resulted in an increased uptake of training, and the industry is attracting more educated workers. Whilst some companies provide training to minimal regulatory requirements, there is an emerging training culture involving structured in-house training, traineeships and some pre-apprenticeships.

Nearly 80% of warehousing workers have no post-school qualifications. However, the new training package pathways and take-up of traineeships by industry should see a shift in the data. Many employers have indicated that they would prefer to employ unskilled workers with the required attributes and qualities whom they can train to their own requirements.

Warehousing was previously considered a predominantly male occupation, with women in administration roles or order picking. However, more women are now working in the sector.

Postal

Australia Post is one of Australia's largest employers and has operations encompassing road, rail, air and sea. Within the private sector, the Major Mail Users of Australia is the peak industry body and represents major mail generators and mailing houses in Australia.[34]

Due to the changes in the way people communicate there have been considerable developments in new technologies which have allowed postal companies to remain competitive in the global economy and environment. Australia Post has had to encompass the electronic age and has developed a dynamic workforce which relies more heavily on new technologies to assist with the movement of goods. Much of its training is done in-house through an intensive program, while private companies are predominantly training on the job, utilising training across logistics, road and warehousing.

The Department of Broadband, Communications and the Digital Economy provides advice to the Australian Government on postal policy and legislation and on issues affecting the postal industry, including setting the broad strategic policy framework and goals for Australia Post and consultations with industry, consumer groups and other government agencies and stakeholders.[35]

The short-term future of parcels and logistics around the world depends on the health of the economy, as consumer spending directly affects demand for the movement of goods. After rapid growth in recent years Australia Post's parcels and logistics portfolio will continue to consolidate its position in readiness for an upturn.[36]

Australia Post is upgrading its major IT platforms, from HR system to mail production and article-tracking systems. It is also introducing new mail processing equipment and improvements to its transport fleet, as well as upgrading its point-of-sale system and online services. Other systems used by industry include mobile data terminals (MDTs) to collect and transmit data directly from the point of pick up or delivery; electronic despatch systems which produce compliant bar-coded labels; and automated sort systems. E-Con notes enable customers to create and email consignment notes to their sender.[37]

Australia Post has a fleet of over 10,000 vehicles including motorcycles, cars, vans, small and large trucks and prime movers and generates approximately 28% of Australia Post's greenhouse gas emissions. It has committed to reducing its fuel consumption through a number of initiatives including the introduction of hybrid trucks and upgrading the fleet with more emission-efficient vehicles. Australia post is also investigating the potential to introduce electric tricycles and other electric load carrying devices.[38]

TRANSPORT AND LOGISTICS INDUSTRY CRITICAL SKILLS

Occupation	Priority Ranking	Justification	ANZSCO Code	Licensing or Regulatory Requirement
Road Transport				
Truck Driver, General Freight, Multi-combination (MC)	High	• Ageing workforce • Competition from mining and construction industries • Regulatory restrictions on age drivers to achieve competence on MC level trucks – takes three years and cannot occur until over 21 years of age due to insurance restrictions.	733111	Fatigue Management System Code of Practice (enforceable under duty of care section of Occupational Health and Safety Act (1984) regulated by: • The Department of Transport • Main Roads WA (for heavy vehicles requiring permits) Regulations relating to minimum vehicle configurations and amount of time for given class of licence regulated by the Department of Transport.
Dangerous Goods Bulk Driver, Tanker Driver	High	• As above • Highly skilled drivers who must have additional time on the road and experience as drivers, normally with an MC licence.	733114	As above New Dangerous Goods Code DG07 introduced in January 2010 regulated by Department of Mines and Petroleum
Driving Instructor	High	• They are lured back to work for higher wages, as they must be experienced and at least hold the relevant licence they are instructing and assessing • Heavy vehicle including MC licence instructors are in highest demand as they are being lured back into more lucrative industries as drivers.	451211	Fatigue Management System Code of Practice (enforceable under duty of care section of Occupational Health and Safety Act (1984) regulated by: • Department of Transport • Main Roads WA (for heavy vehicles requiring permits) Regulations relating to minimum vehicle configurations and amount of time for a given class of licence regulated by the Department of Transport.
Taxi Driver	Low	• Department of Transport is the regulatory authority for taxi driver licensing in WA. As at September 2010, records held by Transport indicate that there are sufficient numbers of taxi drivers in metropolitan WA • Apart from the driver's licence, the training time is not extensive so with enough competent applicants this could be corrected quite easily. • Focus on English competency may impact on ability to attract as many workers from non-English speaking background	731112	• Taxi services are governed by the Taxi Act 1994 and country taxi services by the Transport Coordination Act 1966 and regulated by the Passenger Services Business Unit of the Department of Transport. • T extension (metropolitan and country) – Department of Transport • Metropolitan taxi plate ownership conditions and taxi plate lease for Government plates – Department of Transport • Metropolitan taxi plate ownership conditions for privately owned plates – Department of Transport • Taxi Dispatch Service Provider Registration – Department of Transport

Occupation	Priority Ranking	Justification	ANZSCO Code	Licensing or Regulatory Requirement
Forklift Operator	Low	• High demand across all industries, which has seen many drivers move to more lucrative jobs	721311	Forklift driving training is a regulatory requirement under Occupational Health and Safety Regulations 1996 regulated by WorkSafe WA. The National Licensing Standard requires operators of forklifts to hold a national licence issued by WorkSafe.
Bus and Coach Driver	Low	• Ageing workforce • Experienced drivers lured into more lucrative industries, such as mining and building and construction • Increasing demand for public transport	731211	Governed by Omnibus Standards Scheme and co-regulated by: • The industry • Passenger Services Division of the Health Department • Department of Transport
Logistics				
Transport Manager	High	• Increasing demand for goods • Increase in freight effort, especially with mining projects, such as Gorgon • High skill level required to meet economic demands of industry	149413	Not applicable
Logistics Manager	High	• As above	133611	Not applicable
Rail				
Train Driver	High	• Drivers with locomotive diesel driving experience are moving to mining companies • 6-12 months lead time to train initially, then another 6-12 months to progress through difficulty • Drivers with trade background are moving back to former jobs as economy picks up	731311	Office of Rail Safety WorkSafe WA
Train Controller	High	• Current national shortage • One company doing training for all others, including mining • Ageing workforce • Stressful occupation with short lifespan for employees • Taken from train driver ranks, so a shortfall all over	712918	Office of Rail Safety WorkSafe WA
Railway Signal	High	• Skills Shortage	712917	Office of Rail Safety

Occupation	Priority Ranking	Justification	ANZSCO Code	Licensing or Regulatory Requirement
Operator		• Moving to mining companies for work • Ageing workforce • Technological changes impacting on existing workforce		WorkSafe WA
Aviation				
Aeroplane Pilot	High	• Global shortage of pilots, with return to passenger and freight volumes quicker than expected after the GFC • Long lead time to achieve licences • Traditional supply of pilots from Air Force has reduced due to strong strategies by Department of Defence to keep them and reduced numbers entering the Air Force • Pilots have started moving to larger airlines, leaving gaps at the lower level • Enormous cost of training impost on pilots, with low wages while progressing through licences.	231111	Civil Aviation Safety Authority (CASA) licences: • Private Pilot's Licence (PPL) • Commercial Pilot's Licence (CPL) • Air Transport Pilot's Licence (ATPL) (required by Scheduled Domestic and International Air Transport, ie regional, domestic and international airlines – see below)
Flying Instructor – Aeroplane and Helicopter	High	• Shortage of both helicopter and aeroplane pilots has meant fewer Instructors • The increase in fly in/fly out, has seen some movement back into flying	231113	As above
Helicopter Pilot	High	• Growth in oil and gas sector, with fly in fly out contributing to high demand • High cost of training ($65,000) • Long lead time for licence • High attrition rate while training	231114	As above
Maritime				
Master Fisher (Skipper – fishing industry)	Low	• Regional challenges (remote locations • Competition between industries (oil and gas) • Seasonal occupation – average seven months of the year.	231211	30 months of sea time plus demonstrating competency in areas such as navigation and OS&H.

Occupation	Priority Ranking	Justification	ANZSCO Code	Licensing or Regulatory Requirement
Ship's Engineer	High	• Global shortage, not alleviated by GFC • Ageing workforce • Competitiveness exacerbated by current growth in oil and gas sector	231212	Regulated as the deck hand integrated rating process is trainee/cadet entry. Trainee: 9 months' watchkeeper's course at college and 36 week sea time. Approximately two years to qualify. Cadet: 13 weeks college, 36 weeks' sea time and 6 months' workshop and then the watch keeper's course part A and B approximately 18 months' college based to qualify; approximately 42 months in total.
Ship's Master	High	• As above • All classes	231213	Regulated as for integrated rating. Progression through rank system. Watchkeeper first level - 9 months formal college with 18 months of sea time total training takes approx three years to second mate then approximately a further 3- 4 years and 9 months of formal training to achieve the position of foreign going Master (Class 1). Lower levels can be achieved sooner.
Integrated Rating	Low – but should be high	• Significant Increased demand from the oil and gas sector. • Requires 13 weeks formal college and 36 weeks actual sea time on a SOLAS equipped vessel. • Difficult to obtain skills due to shortage of training session availability and lack of available berths on suitable vessels for sea time and training positions.	899211	Regulated as for Deck Hand IR progression through rank system based on completion of formal college training and demonstrated competency in watchkeeping Marine crew operating in the offshore oil and gas industry, and coastal trade eg tugs, support vessels, barges, rigs, coastal shipping etc are primarily regulated by: AMSA (primary regulator) with other industry specific regulators: National Offshore Petroleum Safety Authority (NOPSA); Department of Mines and Petroleum and Department of Transport (Commercial Vessel Safety Branch)
Deck Hand	Low	• Increased demand from the oil and gas sector Note: A deck hand can be qualified with a little as the Certificate of Safety Training and experience. STCW 95 requires two weeks' formal training.	899211	Marine crew operating in coastal waters, eg ferries, charter and fishing, are regulated by the Department of Transport (Commercial Vessel Safety Branch) in accordance with the United Shipping Laws (USL) Code. Most RTOs are developing their training programs to meet the anticipated AMSA regulations which will operate nationally for all vessels through the "tinny to tanker" proposal. Marine crew operating in the offshore oil and gas industry, eg tugs, support vessels, barges, rigs etc, are primarily regulated by: • AMSA (primary regulator) • Department of Mines and Petroleum • Department of Transport (Commercial Vessel Safety

Occupation	Priority Ranking	Justification	ANZSCO Code	Licensing or Regulatory Requirement
				Branch) • Marine crew working in port and other non oil and gas related activity are also regulated by WorkSafe WA.
Warehousing				
Warehouse Administrator	Low	• Growth in freight effort has seen need for more highly skilled Administrators, unique to transport and logistics	591116	Not applicable
Ports and Stevedoring				
Stevedore	High	• Growth in shipping freight has led to a skill shortage • Wider ranging skills are now also required, including forklift driving and gantry crane operation • New ports opening and increasing operations in existing ports due to upgrades	891113	• WorkSafe WA • Licences relating to other skills achieved
Marine Pilot	High	• Increased demand from oil and gas sector • Difficult to obtain skills due to shortage of available births available on boats for training • Highly skilled occupation that has traditionally been taken up by experienced captains, but if available they are staying longer in workforce due to other demands	231213	Maritime crews operating in international waters, eg crew on international cargo ships, are regulated by AMSA, which administers the Seafarers' Training, Certification and Watchkeeping Code (STCW 95). Marine crew operating in coastal waters, eg ferries, charter and fishing, are regulated by the Department of Transport (Commercial Vessel Safety Branch) in accordance with the United Shipping Laws (USL) Code. Most RTOs are developing their training programs to meet the anticipated AMSA regulations which will operate nationally for all vessels through the "tinny to tanker" proposal. Marine crew operating in the offshore oil and gas industry, eg tugs, support vessels, barges, rigs etc, are primarily regulated by: • AMSA • Department of Mines and Petroleum • Department of Transport (Commercial Vessel Safety Branch) • All marine crew working in port are also regulated by WorkSafe WA.

Occupation	Priority Ranking	Justification	ANZSCO Code	Licensing or Regulatory Requirement
Other Occupations				
Engineers	High	• Engineers in all sectors are experiencing major skills shortages, which is impacting on the transport and logistics industries • Rail engineers (civil or electrical) take 10 years to achieve competence in the rail sector following graduation		Not applicable
Signal Technicians	High	• Current skills shortage, with growth in industry expecting to make it wider.		Electrical licences

ISSUES, BARRIERS AND STRATEGIC ACTIONS

Theme 1: Labour Market and Supply

*Note: 457 Visa must be supplementary to the workforce and only be utilised after the local, state and national workforce has been exhausted. Wherever 457 visas have been utilised the Government needs to make a commitment to provide a funded training place for a local worker in the identified skill shortage occupation for future workforce needs.

Barrier	Strategies and Solutions	Priority	Responsible
All Transport and Logistics Industries			
Lack of appropriate skilled workers	• Upskilling and reskilling of existing workers by identifying existing skills and skills required and providing gap training funding by Government (skills sets). • Displaced workers from other industries – current skills mapped against skills required. Identify shortfall and skill to appropriate level.	Acute	Industry RTOs SG
Global demand for workers is seeing local workers poached by overseas companies in the same way industry is bringing in overseas workers.	• Government and industry to introduce incentives to encourage workers to stay in Australia, eg tax benefits for employees and companies.	Acute	FG Industry
Keeping up with rapidly changing technology is an issue for industry, government and RTOs	• Roll out new technology in stages and government, industry and RTOs work together as new technologies are implemented to ensure that Government regulations, policy and RTO response to training is aligned. • RTOs need to ensure that trainers are given the opportunity to return to industry to learn new technologies in advance of students and given government support and encouragement. This should include government funding for trainers to return to industry.	High	Industry LTC RTOs SG
As industry picks up, it is looking for more experienced workers, and the demand has caused both a shortage and movement of workers to companies that pay more.	• RPL can be used as an entry and exit strategy for companies to ease movement into industries. • Fly in fly out to work sites.	High	Industry LTC RTOs,
Employer Nomination Scheme (ENS) to become a permanent resident can take four to five months to arrange due to lengthy paperwork (relating to company) required for each application.	• Facilitation and smoothing the bureaucracy of bringing in labour. • Streamline process by Federal Government.	High	FG

Barrier	Strategies and Solutions	Priority	Responsible
Difficulty for companies using 457 visas* due to lack of knowledge of candidates, eg background and relevant experience.	• Government needs to establish a strategy that will focus on the alignment of needs and competencies of different countries and assist with the process, especially where there is a high risk involved, eg such as licenced occupations, when working with different agencies in different countries.	Medium	FG
Keeping up with the latest legislative, compliance and enforcement changes that are applicable to the logistics industry.	• Greater support from government bodies in advertising and provision of workshops to explain how changes will affect operations. This needs to involve not only companies but also training organisations.	Medium	FG, SG Industry LTC, RTOs
Rail			
Desperate shortage of engineers	• Run graduate program to attract graduates in engineering then specialise, eg signalling engineer takes two years. • Attract female graduates as intern engineers, approach universities and offer jobs before final exams. • 457 visas* for engineers, managers from UK	Acute	Industry LTC
Shortage of drivers, maintainers for new projects, mechanical and electrical tradespeople (expected 500 drivers required in next five years	• Government implementation of traineeship schemes • Industry to become more performance-driven, offering incentive schemes. • Skilled migration to recognise skills required in Australia that are unique to certain countries. • Industry to become more proactive in training local drivers in down times and planning for when drivers are needed.	Acute	FG, SG Industry
Culture of older workers	• Create cultural change at company and industry-wide levels via communication, involvement and participation to ensure openness to change and create long-term sustainability of the industry. • Need to develop systems for older workforce to mentor young people and promotion of incentives	High	Industry LTC
Maritime			
Not enough masters and engineers at the higher level to service the industry.	• Industry to develop alternative pathways from other occupations, especially the engineering sector, to allow for fast tracking skilled workers to upskill as engineers etc. • Need to look at immigration to encourage the future of the sector by bringing in permanent workers for the industry. • 457 visas* for these workers as a last resort.	High	FG, SG Industry Regulator

Barrier	Strategies and Solutions	Priority	Responsible
Workers in pearling industry out of Broome are struggling due to short season and lack of continuous work. This is especially apparent within the indigenous workforce.	• Need appropriate mentoring and training that will allow workers to source other work in the off season, and still utilise their basic skills. • WELL Funding is required for the workers as language, literacy, numeracy is a major issue. • The pearling industry to identify suitable pathways for workers.	High	FG Industry LTC
Differences in regulations between different vessels, blue water, inshore, offshore and fishing, has meant that difficulties can arise for those experienced maritime workers wishing to move from one type of vessel to another. Greater flexibility and the use of Recognition of Prior Learning (RPL) would address this issue.	• Tinny to Tanker (T2T)*, if approved, should address this issue • The regulator also needs to ensure new regulations are implemented as soon as possible. *Note: The Australian Maritime Safety Authority (AMSA), the major regulator for the maritime sector in Australia, is in the process of introducing the Tinny to Tanker Seafarer Certificates (T2T) which are a complete suite of AMSA certificates to cover all Australian seagoing qualifications from near-coastal (including fishing) to unlimited. All qualifications are to be compliant to international convention, STCW and STCW-F).	High	Regulator

Theme 2: Workforce Participation

Barrier	Strategies and Solutions	Priority	Responsible
All Transport and Logistics Industries			
Transport industries have poor participation rates by under-represented groups, especially women, indigenous people and people with disabilities	• Government to implement employee assistance programs. • Informal mentoring – on the job training. • Formal programs to train indigenous people. • Utilisation of female workers as second wage earners in metropolitan and regional areas with flexible working hours, eg school hours and school holidays • Flexible working arrangements for single parents and minority groups. • Acknowledgement of cultural and personal differences.	Acute	FG, SG Industry LTC
Older workers	• Restructuring job roles for ageing population, eg remove from stressful operational roles and into other roles (planning, mentoring at higher levels and operating forklift, and packing at lower levels. • Creating new roles to understudy staff who are nearing retirement • Promotion of opportunities by the LTC.	Acute	Industry LTC
Non-English speaking workers struggle to have existing skills recognised as they do not understand the process	• Alternative entry into the industry – implement a process that targets people from linguistically diverse backgrounds to enable them to have their skills recognised and use them in the workplace. • Improve the RPL strategy, especially in relation to underemployed staff.	High	FG, SG Industry
In some instances immigrants and refugees are not getting the continuing support from government in training and health, including mental health. Industry is bearing the cost for such services.	• Government assistance - although help is given initially, follow up services are needed for immigrants/refugees who struggle in the workplace. • Industry to identify where it can provide assistance through mentoring.	High	FG, Industry
Companies have strict drug and alcohol policies (pre and current employment testing) which puts limitation on entry into industry	• Due to strict regulations, it is important to have drug and alcohol education at schools to make students aware of the implications on future careers.	Medium	Schools SG

Barrier	Strategies and Solutions	Priority	Responsible
Road			
Taxis – due to the increased number of culturally and linguistically diverse (CLD) workers in the taxi industry poor language, literacy and numeracy skills are having a big impact on the industry.	• Addressed by new regulations from 1 July 2010. All taxi regulators have been involved in the development of pre-admission communication skills requirements. Applicants must meet certain levels in reading, writing, speaking and listening. • Drivers must undertake professional development training every two years in order to maintain registration. This is an opportunity for industry to identify drivers who require language, literacy and numeracy training and develop appropriate courses. • The TLISC is working with national and state regulators to develop units of competency to address some of the issues.	High	LTC SG TLISC
Accreditation system introduced by Main Roads WA requires training in fatigue management, completion of paperwork etc which deters some older drivers	• Mentors from industry for paperwork/assistance and motivation in lifelong learning. • Main Roads WA to work with industry to introduce a one stop shop where employees could update their skills and develop their on-line requirements.	Medium	Industry LTC SG, ,
Lack of understanding of legal business practices and obligations by owner drivers, eg fleet owners who started with one truck, and now have many. Owners may also lack the time to do the training.	• Funding for training courses relevant to the industry for small to medium enterprises. • Better promotion of small business courses.	Medium	LTC SG,
Warehousing			
Major issues in dealing with minority groups: • Those with poor literacy/numeracy skills, learning difficulties or who have left school. • Indigenous Australians who are disconnected from education, training and employment opportunities • Those in contact with the juvenile justice system, exoffenders/those leaving detention and language, literacy and numeracy in some cases • Refugees, recent migrants, and language, literacy and numeracy.	• Make clear reference back to Centrelink regarding support needed to assist in language, literacy and numeracy or advise participants on training provider support in this area. • Offer participants mixed modes of delivery, if possible on and off the job. • Incorporate relationships with job network providers and referral networks in learning programs and strategies. Reasonable adjustment is required.	High	FG Industry Job networks, RTOs

Barrier	Strategies and Solutions	Priority	Responsible
Maritime			
The type of trade a worker has impacts on the length of time for training to appropriate marine engineer certificate, eg mechanic does a four year cadetship while a fitter and turner does an 18 month traineeship.	• The national regulator needs to broaden the trade definition and recognise different trades as appropriate pathways under its regulations. Marine Orders 3 should address this issue. • Year 12 pathway for engineering cadetship to be developed. • Establishment of new pathway into the maritime industry with streams leading to outcomes such as integrated rating, deck officer, marine engineer and watchkeeper.	High	Regulator

Theme 3: Planning and Coordination

Barrier	Strategies and Solutions	Priority	Responsible
All Transport and Logistics Industries			
Regional variation to skills shortages not recognised enough by the Federal Government	• State Government needs to lobby Federal Government for greater focus on WA's unique situation eg more roads, rail, greater distances to travel.	High	SG, FG, LTC
Shortage of high level workers to run the industry and low investment in training of WA managers	• Government to provide assistance for small to medium enterprises on succession planning, eg extension of small business centres • Active campaign to target major companies to find out their needs and issues. • Recruitment/training of managers with the ability to inspire others	High	Industry LTC SG
Reliance on casual labour due to fluctuations in business, peaks and troughs and seasonal work, therefore less job security	• Strategies to identify how business and employees can work together and share workers across companies.	Medium	Industry LTC
Road			
Lack of clear pathways from school in the period leading up to eligibility to drive heavy vehicles. Cannot start progressing into licencing for one year after obtaining C licence.	• Creation of clear pathways involving job roles from other areas, eg yard operations, forklift, some warehousing functions if available.	Acute	LTC TLISC
Long timeframe to progress through licences to become heavy vehicle driver, eg three years to obtain a multi-combination licence. This has resulted in a lack of drivers progressing through licences. Industry penalised by heavy excesses and restrictions on young drivers by insurance companies.	• Identify companies who require LR/MR/HR/HC and MC drivers and progress through each company. • Harmonisation of licences nationally • New national initiatives to shorten timeframe taken to progress through licences • Pathways to progress through licences quicker. • Due to the graduated driver training scheme which has been agreed at a national level and based on nationally agreed guidelines, it is suggested that changes would need to be revised also at this level. • Strategies developed to reward companies who ensure young drivers meet all skill and safety requirements in a heavy vehicle. • Companies doing training to get lower premiums. Note: There are provisions in the Road Traffic (Authorisation to Drive)	High	FG, SG Industry Insurance companies Regulator

Barrier	Strategies and Solutions	Priority	Responsible
	Regulations 2008 (R22) which provide that applicants may be exempted from age or eligibility requirements (such as requirement to hold a licence for specified time) as demonstrated for undue hardship on a case-by-case basis (for older drivers). Liaison with peak bodies and major insurance companies to lift restrictions on younger drivers without penalty.		
Owner drivers not being paid for their services within the stipulated timeframe, eg 30 days, as set down in the Act and Code of Conduct, which has forced some companies out of business whilst waiting for payment.	• The introduction of the Code of Conduct by the Department of Transport on 1 July 2010 should ensure that companies are paid on time, however, this will have to be closely monitored to ensure that the regulations are followed and enforced.	High	SG
Lack of harmony between States regarding transport requirements for road movement which is negatively impacting on the industry. State governments not consulting adequately with industry to identify more streamlined system.	• Federal Government needs to develop a national system of harmonious road rules and regulations governing movement of trucks so they can move from State to State with the same requirements. This should be addressed by the implementation of National Heavy Vehicle Regulator, however this is not expected to become operational before 2012/13. • Coordinated approach, communication strategy, issues to feedback to Government.	High	FG, SG Industry
Concerns that the new regulator will not recognise fatigue arrangements in WA, but they will be recognised across Australia in line with other States. 95% of WA business is intrastate and involves much longer stretches of road between towns than other States.	• State Government needs to lobby Federal Government to ensure fatigue management and other appropriate regulations, eg pilot vehicles, are appropriate for WA. • A range of measures is being pursued by the Department of Transport and Main Roads WA NHVR Project Team to ensure that WA's industry and regulatory benefits are protected through either formal representations at the high level reference group or NHVR Drafting Advisory Panel and through expert working groups. A number of protections are expected to exist for WA industry through the use of local productivity variations which will ensure that established benefit losses are minimised. • Industry needs to work closely with government to ensure its concerns are being heard.	High	FG, SG, Industry Regulator
Pilot vehicles – Some pilots do not have a good understanding of business practices or enough practical training. Accreditation is not mandatory, resulting in poor quality, inconsistencies in training and many drivers not meeting the requirements of the job.	• Government needs to develop, in consultation with industry, a code of conduct for pilot vehicle operators. • Code of conduct must be enforced through legislation which informs training, quality in industry and is responsibility of Main Roads WA.	High	Industry LTC SG
Rail			

Barrier	Strategies and Solutions	Priority	Responsible
Difficult to place young trainees in some operational roles due to safety concerns.	• Undertake research to identify where young trainees can be placed. • Provide traineeships for 17 year old school leavers who would go into other jobs or training because they are not old enough to work on the track. • Young trainees need to be trained to replace skilled workers on metropolitan/rural projects.	Medium	Industry LTC
No nationally recognised track access card which makes transfer of jobs between the States difficult.	• Harmonisation of licences currently proposed should cover this. State government needs to lobby to ensure it occurs.	Medium	Regulator SG
Aviation			
Shortage of experienced instructors for pilots	• There needs to be greater incentives for Pilots to become Trainers. It is a very low paying job, as many trainers are only paid for flying time, not time on the ground doing preparations, briefings and debriefings. • When senior pilots reach 60 they are restricted from flying in some international airspace. With a more streamlined system, the regulator could grant these pilots, who have extensive experience, an instructor rating to allow them to train new pilots.	Acute	Industry Regulator
Shortage of high level managerial staff in airports due to shift and penalty pay versus managerial salary	• Airports need to develop strategies for mentoring new and key staff and to identify career progression for existing workers	Medium	Industry LTC
Maritime			
Government policy forecast a surplus of workers in maritime due to the global economic crisis, yet did not plan for the lesser impact it has had on WA. As a result industry did not invest in training for the future, and a shortfall now exists. This will impact on the viability of the industry.	• State Government needs to support initiatives to encourage industry to train the workforce at a higher rate than currently occurs. This includes assisting industry in overcoming barriers such as available berths on boats for trainees.	Acute	Industry LTC SG
Not enough skilled workers, such as marine pilots and harbour masters, especially for jobs in regional ports	• Marine or maritime pilots could be trained to work in one particular port only, with more limited time at sea. Alternative pathways could be examined to support this model. An appropriate body needs to provide leadership for the model to work.	High	Industry LTC RTOs
Many regulatory requirements impact on skill requirements of crews, who cannot move vessels which may be only slightly larger than those they trained on because of regulations for	• T2T is aimed at better streamlining of task and will make it easier to move to the next size vessel without the same restrictions. • Industry needs to lobby Government to ensure new regulations	High	FG Industry

Barrier	Strategies and Solutions	Priority	Responsible
each category. This is an obstacle to recruiting from blue water into offshore, as vessels are bigger and require different skills. It could take up to six months to retrain, even if rated at the correct level to crew the boat.	meet industry requirements and are approved and implemented.		LTC
Due to changes in the fishing laws, a shortfall is expected in future workers for the rock lobster and fishing industries, as deck hands will move away from industry for more secure full time work. This will cause a decline in the next 5-6 years, and could see even greater problems for the maritime sector, as this has been a breeding ground for future masters.	• Government to review policies to ensure alternative pathways for training for masters available. • Industry needs to promote the strong career progression available for Master 5 to move up to Master 4 and higher as they work in the industry.	High	FG, industry, LTC
Masters and engineers have to take a step back to be able to move up to the next level, which is prohibitive for many as they drop pay and conditions to do so, and this has seen a steady decline in Class 3 engineers.	• State governments to streamline the process by supporting the T2T proposal from AMSA, but should ensure it meets industry's requirements and does not cause more confusion than currently exists. This includes ensuring each State and National regulation aligns for the maritime industry. • Provide exemption for lower level MED to drive vessels, while in training to raise the level. This would need to be approved by the regulatory authorities and could be addressed through a transition qualification with accompanying prerequisites.	High	SG, FG, regulator, TLISC, LTC
When new T2T regulations are approved, there will be a large requirement to assist both industry and RTOs with RPL as the new streamlined qualifications come on line.	• Funding of RPL for existing workers • Funding for gap training • Development of a bridging course for existing workers with a nationally consistent transition tool to be used by RTOs. • Development of a nationally consistent RPL tool and set of strategies to ensure an appropriate outcome.	Medium	FG Industry Regulator RTOs

Theme 4 – Attraction and Retention

Barrier	Strategies and Solutions	Priority	Responsible
All Transport and Logistics Industries			
The transport and logistics industry has always had a poor image, being seen as dirty with no incentives to join and few career opportunities or pathways. It is imperative that the profile of the industry be raised to attract young entrants, particularly as the industry has an ageing workforce.	The LTC will work closely with industry and other key stakeholders to ensure the following strategies are investigated: • Develop authentic pathways with clear outcomes in terms of actual jobs and qualifications and provide information at VET level and beyond. • Attract students through school based traineeships. • Develop VET in schools programs. • Offer traineeships as incentives by more marketing. • Promote lifestyle, management prospects, benefits of owning small business. • Planned industry/school visits by industry professionals to talk to students about career opportunities. • Raise industry profile and develop public awareness. • Utilise young people as industry champions to promote the industry. • Offer more structured career advice programs. Training councils could talk to careers advisors annually to highlight career opportunities in industry. • Identify pathways in warehousing, distribution and logistics – look at roles that will allow them to build, eg forklift, load and unload, and provide links to other industry pathways, eg warehousing entry could lead to road transport, stevedoring etc. • Industry to encourage senior staff to teach skills, safety requirements through incentives. • Broaden industry to include supply chain, with some purchasing and planning to make more attractive.	Acute	Industry LTC RTOs Schools SG,
Movement of workers out of the industry to other, more highly paid sectors, or within the industry, resulting in lack of workers or lower quality workers.	• Industry to investigate incentives: training; competitive pay; long service leave for employees in remote locations after 3 or 5 years; incentive schemes for teams based on safety record; rewards, monetary and non-monetary, after period of service; incentives which focus on family life and values; profit sharing, recognition by awards.	Acute	Industry LTC

Barrier	Strategies and Solutions	Priority	Responsible
	• Multi-skilling of staff. • Succession planning due to movement and promotion of workers. • Flexible working hours. • Utilisation of casual labour. • Graduate programs in all areas. • Engaging with staff - understanding and addressing staff needs; conducting surveys and acting on feedback; fostering good working relationships; implementing a well-defined code of conduct and standards for employees. • Employees' assistance programs offering health and wellness, counselling, mental health, nutritional assistance and fatigue management courses for employees and immediate families • Restructuring of company and automation to reduce higher numbers. • Promotion from within. • Conduct exit interviews to find out why people are leaving and address issues • Training as a strategy to keep workers, with the offer of extra training opportunities and commitment to stay on for two years with permanency and added incentives.		
In some instances public transport availability has not kept up with current industrial development.	• Government to review public transport routes to industrial areas which have been previously developed.	High	LTC SG
Difficulty in attracting and retaining young staff due to their culture, eg need for rapid progression	• A better understanding by management in dealing with generation X and Y. This could be achieved through workshops, facilitated by the LTC. • Mentoring and using industry champions to raise industry profile, especially by other young people. • Alternative sourcing by social media, eg Facebook, Twitter	High	Industry LTC
Difficulty in attracting workers to some country locations due to lack of infrastructure, eg hospitals for children, shortage of land for housing, shortage of facilities, eg day care, specialist doctors	• Better infrastructure, caravan parks – recognise value of facilities to tourist population and transient workforce • Location allowance for country service. • New land to be released. • Company accommodation • Incentives, eg long service leave after shorter period of time	High	FG, SG Industry

Barrier	Strategies and Solutions	Priority	Responsible
	• Improved infrastructure, eg hospitals, doctors, facilities for children etc.		
Movement of young people away from regional areas due to lack of facilities to keep them means that available pool of workers is older.	• Need to ensure opportunities are made available to keep young in regional centre, eg school subject options, an opportunity to study at university or VET without having to move away.	High	Industry LTC, RTOs Schools
Lack of facilities for fly in fly out and road transport workers – no accommodation available as competing with tourists and gap year workers for facilities.	• Government needs to influence shires to make caravan parks more available for workers to stay, while not excluding tourism sector, which is vital for State's economy, especially in places such as Port Hedland, Karratha and Broome, where both increased workforce and tourism compete for accommodation.	High	LG SG
Loss of senior people when new companies take over as a changed culture impacts on the work environment.	• Companies need to formulate a management process to ensure the needs of existing managers are met. • Incentives to stay in the company.	Medium	Industry
Road			
Lack of infrastructure, particularly in country locations, eg rest and food stops, facilities. Current facilities are overutilised by tourists, so some trucks have nowhere to stop and cannot satisfactorily meet the requirements of Occupational Safety and Health.	• Raise awareness of problems through media. • Lobby state and local government to provide more facilities to allow drivers to meet the requirements of Occupational Safety and Health.	High	SG, LG
In some instances it takes up to three months for the issue of dangerous goods card (DGSC) required for DG drivers and secure sites. Therefore prospective employees who do not currently hold the card cannot be employed or must be employed in other non-secure positions until the card is issued. Alternatively the driver may operate "two-up" under the control of a driver holding a DGSC. The card must be applied for in WA and cannot be posted out of the State. Employees from interstate with equivalent card, clearance or permit can work for 90 days, but staff from overseas are precluded.	• The State government needs to review its processes on issuing licences and reduce timeframe taken to process.	Medium	SG
Drivers in the mining industry who only drive on mining leases, do not require the relevant truck licence, so cannot transition into the transport industry when they leave the mining industry.	• Encourage mining companies who train unlicensed truck drivers to have employees undertake the necessary State licences and put more licences into the system when drivers leave the mining industry. However, it is vital that the licence issued reflects true road conditions and not just driving on mine sites. There could be an opportunity for a provisional licence to be issued while more experience off the mine site is obtained.	Medium	Mining industry SG

Barrier	Strategies and Solutions	Priority	Responsible
Taxis – in some instances there is a six week gap between training and final testing for a taxi licence. Some drivers cannot wait that long and go into other jobs.	• Industry needs to lobby the State government to ensure a shorter time duration between training and final testing to ensure knowledge is current and relevant and a higher pass rate is achieved.	Medium	SG
Taxis/buses –there is a perceived security risk that drivers face.	• Training courses for drivers in place but more needs to be done. • Industry and government to work together to identify appropriate security measures. • Education of public through the media.	Medium	SG
Taxis – Rank security struggling to deal with culture of industry and the general public. Industry struggling to find suitable staff.	• Formal training through qualifications/skills sets, which focuses on knowledge of industry, fares, security issues and language, literacy and numeracy • Employ guards with skills in crowd control and people management.	Medium	Industry SG
Rail			
Some unskilled jobs, eg track workers, have skill bases at entry point that are easily transferred to other manual and labouring roles, therefore the turnover is high.	• Develop authentic pathways with clear outcomes in terms of actual jobs and qualifications to encourage staff to stay.	High	Industry LTC TLISC
Aviation			
Difficulty in keeping workers in regional airports when work can be seasonal and drop from full-time to part-time in the off season, eg Broome	• Industry needs to identify where demand is in different months and ensure that airline workers, mainly pilots, are given the information to enable them to move where the jobs are.	High	FG, SG Industry Regulator
Maritime			
Loss of high level workers out of industry, which creates gaps as there are not well-developed pathways for them into senior roles.	• With the assistance of government, industry needs to identify clearer pathways for master mariners to become harbour masters, pilots and port managers. • An accredited graduate certificate to become a marine pilot has been developed but with little support from the sector. This qualification needs to be revisited to see if it meets needs then promoted actively.	High	Industry, SG
The pearling industry has a very transient workforce as work only lasts a couple of months and training is too long for deckhands. Global downturn has had an impact on industry, which has seen many workers lose their jobs.	• More appropriate training outcomes for this workforce would ensure regulatory requirements are met while not having such a huge onus on overtraining for the work and time employed. A restricted coxswain ticket to suits this industry would be the best outcome, but needs AMSA approval.	High	LTC Regulator TLISC

Theme 5 – Training and Productivity

Barrier	Strategies and Solutions	Priority	Responsible
All Transport and Logistics Industries			
Companies training during downturn but not continuing through peak times.	• Incentives to be provided by government to encourage employers to continue training during high employment. • RPL can be used to ensure existing skills are recognised so that workers are more productive during training.	Acute	Industry LTC RTOs SG
Difficult and costly for small business to access training that meets needs.	The following are suggested strategies to address the issue: • Customised training delivered on or offsite. • RTOs need to be flexible and able to deliver to small numbers. • After hours/weekend training programs. • Skill set programs/qualifications. • Coordinated approach to access cost-effective training opportunities. • Government needs to investigate funding models for niche/small markets to ensure training is available to all.	Acute	FG, SG LTC RTOs,
Limited delivery in regional centres especially for niche industries with expensive training requirements.	• Promotion of training and coordination of training dates, venues to townships and outlying areas through advertising by well-connected regionally based persons. • Training en masse in regional centres to ensure local access is cost effective. • Greater cooperation and joint ventures between industry partners, providers and the LTC • Travel and accommodation funding for regional trainees to visit metropolitan depots of industry partners. • Larger companies with the ability to run their own courses in regional centres could invite companies to participate in training sessions if places available. • Organised coordinated road trips to regional centres by the LTC and TLISC to industry to promote these strategies. • Greater support by Government for RTOs in thin markets, especially in a coordinating role and with greater financial incentives.	Acute	Industry LTC RTOs, SG

Barrier	Strategies and Solutions	Priority	Responsible
	• Government and industry to work together to ensure regional RTOs have the available technology and resources required to deliver a high quality training product. This could be done by utilising industry's resources. • Use of E-learning to improve remote delivery capacity for industry • Stronger partnerships and auspicing between RTOs and industry, both state and nationally based will strengthen access for regional areas.		
Limited opportunities and interest through VET in schools – students not advised or directed into the transport industry by VET coordinators	• Coordinated and financial strategy to showcase the industry as contemporary, safe and with career prospects. • Change perspective of VET coordinators by active education program aimed at educators and institutions (target years 10 and 11). • Concentrate on underpinning knowledge and career opportunities. • Development of materials for distribution to schools and participation at careers expos. • A dedicated transport and warehousing training centre which offers practical on the job experience for VET school students.	Acute	Schools LTC SG
Not enough trainers for any of the sectors, as many lured back to industry for higher paying jobs	• Workers nearing retirement to be encouraged and supported to become trainers rather than leaving the workforce. • Trainers to be given flexibility to work part-time for RTOs and still work in the industry. This would be a good transition to retirement strategy.	Acute	FG SG Industry LTC
Difficulty in training staff who work offsite or away from the base camp, eg drivers who are on the road all day	• On-line training tools (E-learning) – strategy to address non-effective work time – can do training on laptop, as long as it does not interfere with fatigue management. • RTOs to look at flexible arrangements where trainees can train offsite when appropriate to competencies. • Bring together employees from multiple organisations to achieve critical mass. • Provide multiple entry/access points for range of competencies. • Schedule time out for training when at base.	High	Industry LTC RTOs

Barrier	Strategies and Solutions	Priority	Responsible
Heavily regulated industry – training linked to regulatory requirements not qualifications.	• Promote training that will meet regulatory requirements as compliance-based, and build capacity of the organisation through additional skills contained in the qualifications.	High	LTC Regulator TLISC
Inconsistency of assessment	• Stronger guidance through training package development and audit processes by industry will ensure consistency of assessment. • Many transport sectors address this issue in a variety of ways, eg there is work being done on national assessment tools for different industries. Great confidence needs to be felt by industry in assessment process and this can be achieved by ensuring RTOs participate more actively in moderation and validation.	High	Industry LTC RTOs TLISC
Lack of equity in funding for different industries and programs, especially where extensive practical training is required on top of theoretical component eg 100 hours flying, 6-12 months at sea	• A funding model needs to be developed to assist those facing huge costs for the practical element of their training through VET Fee Help. This should also include support for those employers who take on the burden of paying for their workers to spend years training, eg maritime.	High	SG, LTC
Lack of flexibility with traineeship periods, and reluctance to utilise traineeships.	• Industry to lobby WA Government to allow the flexibility the industry needs to be efficient. • Improve flexible traineeships to better meet industry needs • Promote benefits of traineeships to employers. • RTO's need to have more flexibility in training.	High	Industry LTC RTOs SG
Limited capacity to train due to infrastructure and the high cost of practical skills development. Simulators are extremely costly to purchase and the returns are nominal only.	• Simulators to be used as a training tool, not an assessment tool. This would offset costs, environmental wastage and pollution and be time effective. However, the high cost of many simulators used in the transport industry would require strategic partnerships between RTOs and industry and in some instances, government assistance.	High	Industry LTC RTOs SG
Little interest in higher level qualifications beyond Certificate III. Workers pursue higher salaries, not higher qualifications, and employers want skills, not necessarily qualifications	• Educate employers regarding the benefits of higher qualifications. • Form working group with representation from all stakeholders to analyse industry staffing requirements including projected needs, and develop a training strategy. • Undertake 5-10 year plans to show future needs. • Provide incentives to encourage training, eg traineeships, productivity placements program, payroll tax exemptions or enterprise-based programs. • Provide incentives to staff, eg higher pay, promotion, supervision,	High	FG, SG Industry LTC RTOs

Barrier	Strategies and Solutions	Priority	Responsible
	company shares. • For many workers in transport sector issues of language literacy and numeracy prevent movement into higher levels, which could be addressed by more targeted programs. • Clear pathways need to be identified to demonstrate the value of higher qualifications and to ensure management levels can be attained. • Link qualifications to KPIs.		
Many employers do not do training, because they struggle to understand the training system, the funding system, who to contact for information and the bureaucracy of dealing with a number of organisations, and it all becomes too difficult.	• Workshops for employers with representatives from different organisations to assist employers to get started, and learn about funding and training, scheduled at a time suitable for employers. • A dedicated website which is user friendly for employers and contains all the relevant information regarding different options.	High	LTC, SG
Casual workers struggle to access training and in many instances are not eligible for traineeships	• Casual workers with multiple employers, who are not currently in a group training organisation arrangement, should be able to access traineeships through a new arrangement with the Government, which recognises the value of their learning across enterprises. This would include having a lead organisation as the principle for contract arrangements.	Medium	FG, SG Industry LTC
For some workers, training in a classroom is intimidating.	• RTOs need to focus on on-the-job training where possible or develop more appropriate training strategies, eg simulated environment.	Medium	RTOs
Lack of supervisors to oversee training	• The Government needs to continue funding for organisations to access supervisor training programs, eg TAE. • Coordination of group trainers/supervisors from RTOs • Ensure training qualifications at supervisory level include understanding the role.	Medium	RTOs SG
Older employees not interested in training.	• Use as mentors for younger employees to pass on skills and see the value of further training. RPL can be used as a tool so older workers can see that they have relevant skills and training.	Medium	Industry LTC RTOs
Training too expensive to run for small numbers or not on RTO scope	• Employers to get together to run training courses so it is cost-effective. • LTC to research which RTOs have the required units on scope and disseminate information to industry. • Increased accessibility to traineeships/apprenticeships.	Medium	Industry LTC RTOs SG

Barrier	Strategies and Solutions	Priority	Responsible
	• Provide grants to suitable external RTOs to develop niche training as a joint venture.		
Whilst many companies pay for upskilling their workers, some expect workers to pay for own training, eg forklift licences. This is due to some workers leaving and working for other companies after completing paid training.	• Funding of skills sets by Government. • As an incentive, companies can agree to pay for training once the employee has continued to work for them for a set period following completion of training.	Medium	FG, SG Industry LTC
Road			
Age restrictions to achieve licences, eg three years to get MC licence and insurance issues for those under 25 years	• A national proposal from national industry body to allow earlier access to the full range of truck licences is under way. • Cadetships. • LTC to work with industry, identify groups of transport companies who will utilise young drivers through licences, eg MR, HR, HC and then progress to MC. • Need for individual investigation, based on background and skills at lower levels for fast tracking through licences. NB: There are provisions in the Road Traffic (Authorisation to Drive) Regulations 2008, R22, which provide that applicants may be exempted from age or eligibility requirements (such as requirement to hold a licence for a specified time) as demonstrated for undue hardship on a case-by-case basis.	High	Industry Regulator SG
High percentage of owner drivers in industry who cannot access funded training for themselves	• Programs such as the PPP have reduced this barrier to some degree. • Industry to lobby State and Federal government to change this ruling. • Government to continue to improve grants for small business training.	Medium	FG, SG
Driving instructors – lack of qualifications compared to other States, where Certificate IV required, so standards not high	• Industry and State Regulator to work together to ensure alignment of qualifications with other States for national consistency. • Employ mature people with extensive driving experience.	Medium	SG, industry
Rail			

Barrier	Strategies and Solutions	Priority	Responsible
Heavily regulated industry where training is linked to regulatory requirements resulting in limited take up of qualifications	• The appointment of the new rail safety regulator by the NTC will see changes made which will include qualifications to meet regulatory requirements. • Industry to lobby the TLISC to ensure this occurs.	Medium	Industry LTC Regulator TLISC
Regional training centred around major rail networks where facilities for training are poor.	• Government to develop high-class facilities in these areas to cater for trainees from other industries, eg road. Industry stakeholders need to invest. • Provide additional funding for RTOs to deliver regional training.	Medium	RTOS SG
Most RTOs are enterprise based and struggle to develop their own resources. These rail companies also have to focus on something that is not their core business.	• Industry needs to be encouraged to invest in the development of resources that can be shared across all companies with additional funding provided by the government. • The LTC needs to work closely with these companies to ensure they have access to all available resources.	Medium	Industry RTOs SG
No public funding provision of industry specific training except for implementation of traineeships.	• Extend scope of traineeships and/or develop a parallel funding model with strict quality criteria for training. • Internships, eg accounts, engineering, document control in final year of university. • LTC to make a submission to Department for a Certificate IV traineeship in rail infrastructure.	Medium	LTC Industry SG
Limited capacity to train due to infrastructure, trainees limited by number of locomotives and number of qualified drivers available to act as mentors.	• A dedicated training facility and courses including train simulator.	Medium	Industry SG
No dedicated qualifications for train controllers	• Lobby TLISC for Certificate IV qualification in Train Control and introduce traineeship to Cert IV.	Medium	SG TLISC
Aviation			
Cost of practical component of training prohibitive to many, especially for pilot training	• Greater use and access to simulators for training aspect to reinforce skills, which need to be recognised by regulator as comparable to partial airtime.	High	Industry Regulator
Maritime			
Time at sea an issue because not enough training places are available on ships.	• Greater use and access to simulators will reduce need for as much time at sea and partnerships between RTOs and industry with simulators will ensure access for all at a cost effective rate. • The shortage of Australian berths could be offset by looking at international waters to access time at sea. This can be done	Acute	SG. Regulator, Industry, RTOs

Barrier	Strategies and Solutions	Priority	Responsible
	through a mentoring program and partnership with other international maritime companies. Language could be a barrier with some international crews so will have to be closely monitored. • AMSA needs to address this issue regarding certification and recognise alternative opportunities for time at sea. NB: T2T may address many of these issues. • Government to influence those agencies that could provide space on vessels for trainees, such as customs boats, Government contracted vessels. New EBA has provision for training places to be made available; however, these provisions need to be monitored to ensure compliance.		
The focus on a National Training Provider, with Federal Government funding accordingly, has meant lack of focus on State Training needs for maritime. There is a high cost for industry to send workers East for training that could be done locally through better auspicing arrangements	• State Government needs to recognise and value local training that is occurring and fund according to industries needs. • Training Providers need to be more willing to partner and auspice with other Training Providers to find a better outcome for industry.	High	SG, RTOs, LTC, Industry
Lack of suitably trained high level workers in Stevedoring	• Fund a Certificate IV traineeship	High	LTC, SG
Issue for marine engineering cadets, who do too much theory upfront, then do their sea time. It could be as long as four years before some of the theory is out into practice. They are highly over-trained before they get a Certificate of competency.	• Need to balance the training with sea time, to address the issue. • RTOs to work with industry to establish appropriate training plan. • AMSA, Industry, Unions and RTOs need to work together to rationalize this model.	High	RTOs, Industry, LTC, Regulator
Lack of RPL across restricted tickets	• Need a better streamlined process. This should be addressed by T2T. • Standard National RPL Tools should be developed to ensure consistency across the nation.	High	TLISC, Regulator, Industry
Huge cost of training plus cost of time lost in job prevents training access, eg 6 week course at $3000 plus $3000/week loss of wages plus accommodation for regional workers. Actual cost $25,000 plus	• Government to investigate funding opportunities for existing workers who have to stop working to do extra training. • RTOs need to be more proactive in finding solutions to reduce the amount of time workers are away from their job for training. The Regulator and TLISC could find a mechanism to assist through the Training Package.	High	TLISC, Regulator, Industry, RTOs
Traineeships and cadetship are problematic, as amount of time in college is costly, and workers are being paid, even while College has time off. Issue of time at sea fitting in with training time. Trainees and cadets appear to be spending	• RTOs need to be more responsive to Industry's needs. • Blocks of training need to be coordinated so training is full on while students are there, then any time off is long enough for	High	Industry, RTOs

Barrier	Strategies and Solutions	Priority	Responsible
longer in training, yet a lot of time is wasted through days off or a week free etc. Cannot send to sea for such a short period of time.	them to be at sea. • RTOs need to work with industry and companies to ensure that all trainees are on same swing for time at sea, with the same blocks off for training. This allows for jobs to be shared e.g. 6 months at sea, 6 months in training and visa versa.		
Different qualifications are being delivered throughout Australia for the same outcome – engineering cadet. A national qualification exists through the national training package but this is not being used everywhere.	• RTOs must align to a national training system, as this is what both the Government and industry have asked for. • Any Training Package qualifications must reflect AMSA Regulations, or they won't be taken up by Industry or RTOs.	High	RTOs, TLISC, Regulator
Long lead time to train a maritime worker, with many requiring 3-4 years, yet with peaks and troughs of industry, commitment to train is a problem, eg putting on workers for Gorgon, yet only a 12 month project. What if nothing else comes along?	• Industry needs to work together to identify opportunities to job share workforce.	Medium	Industry, LTC
All companies are training to capacity, but not enough to meet the future needs of the industry. Oil and gas companies are happy to pay for training, but can't get berth space.	• When a floating production, storage and offloading (FPSO)* unit is moored with an oil rig, the time spent by crews is not counted as sea time as vessels are not moving, however, this would be a good opportunity for trainees to get berth space for their training. The regulator does not currently recognise this time.[1]*	Medium	Industry, Regulator

Key:

FG	Federal Government
LG	Local Government
LTC	Logistics Training Council
SG	State Government
RTOs	Registered Training Organisations
TLISC	Transport & Logistics Industry Skills Council

Note: Industry includes unions and peak associations.

[1] Note: An FPSO is a floating vessel used by the offshore industry for the processing and storage of oil and gas. An FPSO vessel is designed to receive oil or gas produced from nearby platforms or subsea template, process it, and store it until oil or gas can be offloaded onto a tanker or transported through a pipeline.

ANZIC DIVISION, SUBDIVISION, GROUP AND CLASS CODES AND TITLES

I TRANSPORT, POSTAL AND WAREHOUSING

- 46 Road Transport
  - 461 Road Freight Transport
    - 4610 Road Freight Transport
  - 462 Road Passenger Transport
    - 4621 Interurban and Rural Bus Transport
    - 4622 Urban Bus Transport (including Tramway)
    - 4623 Taxi and Other Road Transport
- 47 Rail Transport
  - 471 Rail Freight Transport
    - 4710 Rail Freight Transport
  - 472 Rail Passenger Transport
    - 4720 Rail Passenger Transport
- 48 Water Transport
  - 481 Water Freight Transport
    - 4810 Water Freight Transport
  - 482 Water Passenger Transport
    - 4820 Water Passenger Transport
- 49 Air and Space Transport
  - 490 Air and Space Transport
    - 4900 Air and Space Transport
- 50 Other Transport
  - 501 Scenic and Sightseeing Transport
    - 5010 Scenic and Sightseeing Transport
  - 501 Pipeline and Other Transport
    - 5021 Pipeline Transport

		5029	Other Transport nec
51	Postal and Courier Pick-up and Delivery Services		
	510	Postal and Courier Pick-up and Delivery Services	
		5101	Postal Services
		5102	Courier Pick-up and Delivery Services
52	Transport Support Services		
	521	Water Transport Support Services	
		5211	Stevedoring Services
		5212	Port and Water Transport Terminal Operations
		5219	Other Water Transport Support Services
	522	Airport Operations and Other Air Transport Support Services	
		5220	Airport Operations and Other Air Transport Services
	529	Other Transport Support Services	
		5291	Customs Agency Services
		5292	Freight Forwarding Services
		5299	Other Transport Support Services nec
53	Warehousing and Storage Services		
	530	Warehousing and Storage Services	
		5301	Grain Storage Services
		5309	Other Warehousing and Storage Services

nec – not elsewhere classified

Endnotes

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[1] Rio Tinto Media Release 25 June 2010

[2] TLISC website – www.tlisc.com.au

[3] TLISC website – www.tlisc.com.au

[4] Department of Transport

[5] Transport Forum, through consultation with CEO, Ian King

[6] Australian Government (2010) Job Outlook – www.joboutlook.gov.au

[7] Department of Transport

[8] Department of Transport

[9] Australian Government. (2010) Job Outlook – www.joboutlook.gov.au

[10] Australian Government. (2010) Job Outlook – www.joboutlook.gov.au

[11] Department of Transport

[12] National Transport Commission

[13] Annual Report 09, National Transport Commission

[14] Transport Forum, through consultation with CEO, Ian King

[15] National Transport Commission Fact Sheet July 2008

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[25] ABS Labour Force Survey, Australia (cat no 6203.0) – average 2009

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[30] Victorian Parliamentary Committee Inquiry into Skills Shortages in the Rail Industry, Industry and Community Planning Directorate, Department of Education and Training (WA) 2009

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[33] Speech by the Hon Brendan O'Connor, Minister for Employment Participation, 24 April 2009 at Australian Trucking Convention 09

[34] Australian Government website http://australia.gov.au/topics/it-and-communications/postal-services

[35] Australian Government website http://australia.gov.au/topics/it-and-communications/postal-services

[36] Australia Post Annual Report 2008-09, Australia Post 2009

[37] Australia Post Annual Report 2008-09, Australia Post 2009

[38] Australia Post website