# Workforce planning issues in the freight industry

Lisa Kazalac, Euan Ramsay and Jenny Morris

Department of Transport, Victoria



#### 1 Introduction

Victoria's economy has experienced many years of continued economic growth with the Transport and Logistics (T&L) industry making an important contribution to that growth. In recent times the national economy has reached levels of near full employment (ABS, 2008), leaving employers in many industries struggling to find, recruit and retain employees; an ageing workforce further exacerbates the problem.

Currently, labour and skill shortages are of particular concern in the road freight sector. Both the truck and freight train driver workforces have relatively old age profiles and are predominantly male. The combination of an ageing profile, the forecast growth of the freight task, and the continued tightening of labour markets into the foreseeable future, is expected to cause additional problems for attracting and retaining both truck and freight train drivers beyond those currently being experienced.

Increasing recognition is being given to the need for workforce planning to address current and likely future labour and skill shortages within the T&L industry. These issues are clearly of vital importance to the T&L industry, since they are inextricably linked to its long term sustainability. The interest in workforce planning on the part of governments reflects the important role that the T&L industry plays in the economy at both national and State levels. In devising appropriate strategies, a distinction needs to be made between skills shortages and labour shortages, since these are different, though related, issues and may require different responses. Skill shortages arise when the pool of labour is not appropriately trained to meet the tasks at hand. Labour shortages typically arise in periods of strong economic growth when the pool of labour is not large enough to meet demand. The development of strategies to address current and/or likely future labour and skill shortages also requires a sound knowledge of the structural characteristics of the respective industries and of the workforce issues involved.

This paper describes the increasing freight task and the structure of the road and rail freight industries in Victoria, with particular reference to their workforce characteristics. The focus of the paper then shifts to briefly identify some of the major workforce issues facing the T&L industry, and to highlight the stronger emphasis now being placed on workforce planning in the road and rail freight industry.

## 2 Background

## 2.1 The increasing freight task

The Australian road freight industry is one of the fastest growing sectors of the economy. The Survey of Motor Vehicle Use (ABS, 1999-2008) reports that the total freight task carried by trucks (excluding light commercial vehicles) in Australia increased by over 59 per cent between 1998 and 2007. The Motor Vehicle Census (ABS, 1999-2007) reports an increase of 11 per cent in the number of trucks registered in Australia between 1998 and 2006.

The proportional increase in the number of trucks was smaller than the increase in the freight task due to productivity improvements - the number of registered articulated trucks increased

by 15 per cent and average distances travelled increased 28 per cent over the same period. The majority of the increase in the freight task in Victoria over this period has been carried by B-doubles. As shown in Figure 1, B-doubles carried 23 per cent of the freight task in Victoria in 1998, rising to 47 per cent in 2006. The number and use of light commercial vehicles (LCVs) has also been rapidly increasing. Between 1998 and 2006, there was a 25 per cent increase in the number of LCVs registered in Australia and a 36 per cent increase in the distance travelled by LCVs.

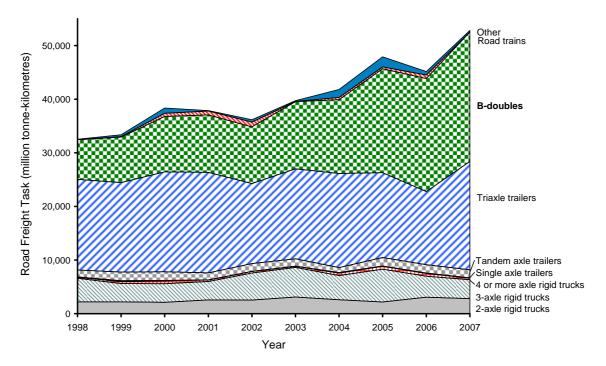


Figure 1 – Vehicles used to carry the Victorian road freight task (ABS, 1999-2008)

The Bureau of Transport and Regional Economics (BTRE 2002) has predicted continued growth in the road freight task across Australia (Figure 2). The majority of this increased freight task is expected to be carried by articulated trucks including B-doubles. The number of articulated vehicles is only predicted to increase modestly relative to other vehicle types (Figure 3), reflecting their higher productivities. However, the vast majority of the increased number of freight vehicles and distances travelled is expected to occur in LCVs.

BTRE (2006) figures show that the Victorian rail freight task has been increasing at a relatively slow rate over several previous decades before privatisation of the rail freight network in 1999 (Figure 4), especially when compared to the economy. Since the late 1990s, the intrastate rail freight task has fallen by an estimated 20 per cent. The Victorian Rail Freight Network Review (DOI, 2007, page 28) attributed this decline to:

- increased road competition (particularly B-doubles)
- continued government investment in the road network
- lack of investment in the rail network
- poor service levels
- sustained periods of drought and non-rail contestable markets such as feedlots.

The Victorian State Government is seeking to address the disparity in growth between road and rail freight sectors. The Victorian Rail Freight Network Review (DOI, 2007) identifies several strategies to improve productivity and investment. In addition, the Victorian Freight Network Strategy aims to ensure that Victoria has an efficient and sustainable freight industry to support Victoria's prosperity and liveability.

According to forecasts by BTRE (2003), the Australian rail freight task is likely to increase in the foreseeable future at a slower rate than the road freight task. Figure 5 indicates the steady increases expected in rail freight volumes throughout Australia. Unfortunately these figures are not disaggregated by State and Territory, and hence it is not possible to identify separately the expected Victorian rail freight task trends.

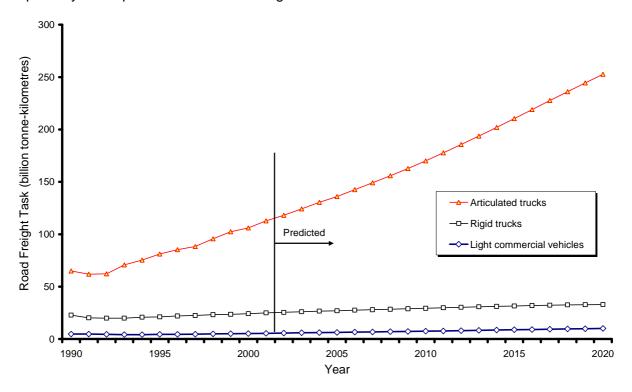


Figure 2 – Predicted freight task by different road freight vehicle types in Australia (BTRE, 2002)

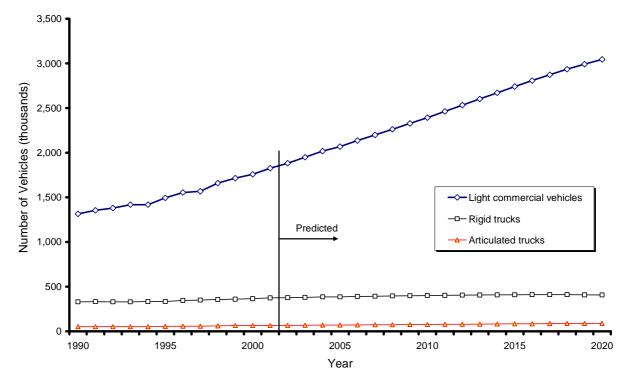


Figure 3 - Predicted numbers of road freight vehicles in Australia (BTRE, 2002)

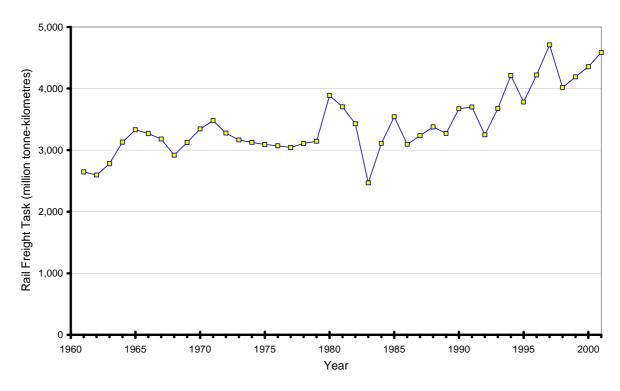


Figure 4 – The rail freight task in Victoria, 1961-2001 (BTRE, 2006)

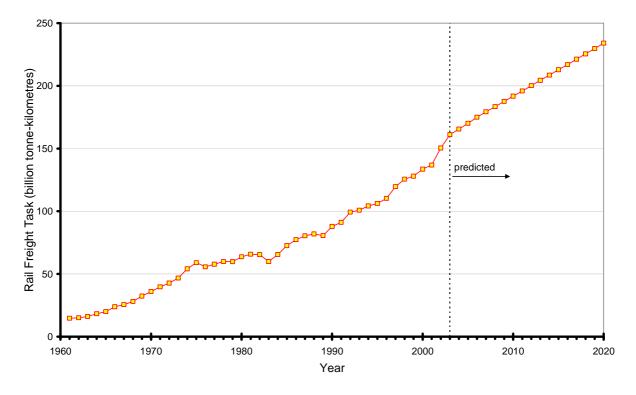


Figure 5 – Actual and predicted trends in the rail freight task in Australia (BTRE, 2003)

#### 3 Workforce characteristics of truck and train drivers

## 3.1 The number of transport drivers in Victoria

According to the 2006 Census of Population and Housing (ABS, 2007), a total of 43 582 persons (1.9 per cent) of the Victorian workforce work as either truck or delivery drivers, with a further 1 294 persons (0.056 per cent) employed as train or tram drivers. Table 1 lists the most common occupations for Victorians according to the 2006 Census. Truck driving is the ninth most common occupation recorded in the Census, and the second most common occupation for males.

Table 1 – The most common occupations in Victoria in 2006 (ABS 2007)

Rank	Occupation	Males	Females	Persons
1	Sales Assistants (General)	34 824	81 801	116 625
2	General Clerks	7 321	40 409	47 730
3	Retail Managers	26 292	20 913	47 205
4	Registered Nurses	3 967	42 236	46 203
5	Receptionists	1 273	31 897	33 170
6	Accountants	18 567	14 102	32 669
7	Secondary School Teachers	12 950	19 434	32 384
8	Primary School Teachers	4 971	26 917	31 888
9	Truck Drivers	29 726	630	30 356
219	Train and Tram Drivers*	2 139	129	2 268
	All Occupations	1 225 537	1 048 913	2 274 450

<sup>\*</sup> The ABS classification used in the Census does not differentiate between freight train drivers, passenger train drivers and tram drivers.

A total of 98 per cent of Victorian truck drivers are male, a similar ratio to that found in other states and territories. Some 94 per cent of train and tram drivers are male, compared with 53 per cent of all employed people across all occupations being male.

## 3.2 The geographical distribution of truck and train drivers in Victoria

The distribution of truck and train drivers is not uniform across Victoria. Figure 6 shows that higher proportions of truck drivers reside in freight-intensive areas of Victoria, such as the outer western and outer south-eastern suburbs of Melbourne, and around the major regional cities. Lower proportions live in the outer north-eastern suburbs of Melbourne where there has been less industrial development.

The proportion of train drivers within the working population is generally lower than for truck drivers, reflecting their smaller overall presence numerically. Figure 7 shows that the proportion is highest in areas served by railway lines, as well as in Melbourne and major regional cities.

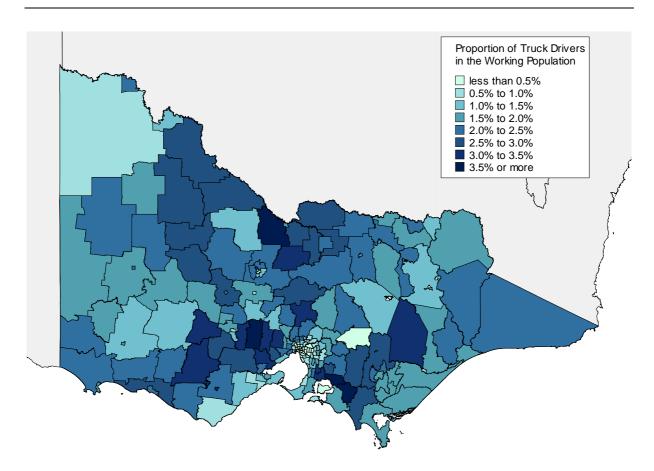


Figure 6 - Proportion of truck drivers amongst the working population in Victoria (ABS, 2007)

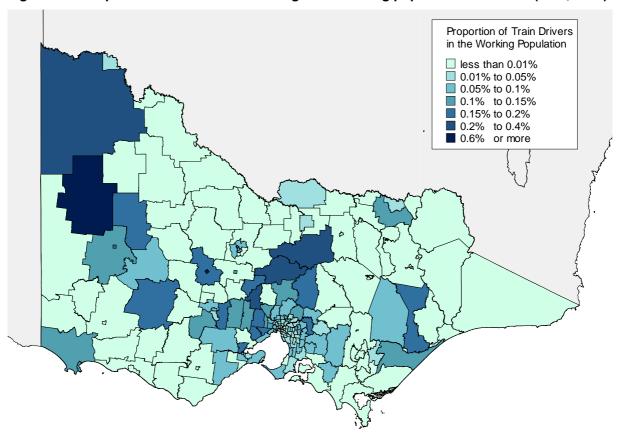


Figure 7 – Proportion of train drivers amongst the working population in Victoria (ABS, 2007)

## 3.3 Age profiles of truck and train drivers

Both the truck and freight train driver workforces are relatively old. The 2006 Census indicates that the average ages of truck drivers (44.3 years) and train drivers and assistants (46.2 years) are higher than the average for occupations overall (40.1 years). Table 2 provides these breakdowns.

The classification for train drivers includes 'assistant' train drivers, who are presumably younger than the train drivers they are assisting. Hence, the average age of train drivers is likely to be even higher than that recorded for this category combined.

	Truck Drivers	Train Drivers	All Occupations
			•
Total in Victoria	30 273	1 924	2 274 449
Average age (years)	44.3	46.2	40.1
Standard deviation of age (years)	11.5	9.1	13.4
Proportion over 55 years of age	19.5%	15.1%	15.0%
Proportion over 60 years of age	8.8%	4.2%	6.8%

Table 2 – Age of truck and train drivers compared to other occupations (ABS, 2007)

Figure 8 shows the age profile of truck drivers and train drivers in Victoria compared to that for all occupations. The profiles are more skewed towards older age groups, for both truck drivers and train drivers. Both driver workforces have relatively few young persons, a higher average age and then a rapid decrease in the number of older drivers, by comparison with the workforce overall. This is most evident in the age profile for train drivers, with very few aged over 65 years.

Freight train drivers are a much more highly regulated industry by comparison with drivers in the road freight sector. Stricter regimes of medical testing in the rail freight sector may account for the sharp decline in the number of train drivers aged over 65 years.

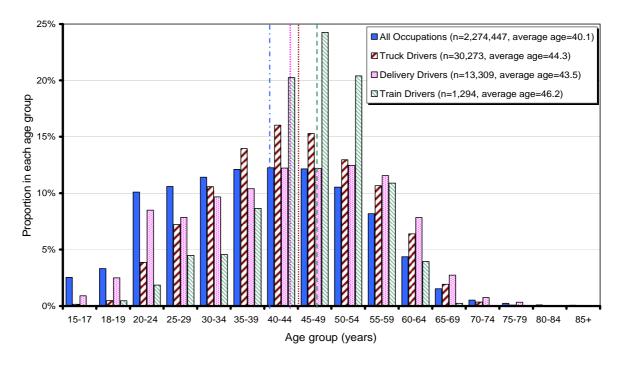


Figure 8 – Age profile of truck and train drivers usually residing in Victoria (ABS, 2007)

The higher average age of truck and train drivers has implications for the future workforce. As seen in Table 3 to Table 5, projecting forward over the next ten years, in Victoria, 9 per cent of the current generation of truck drivers and 4 per cent of train drivers will have reached the age of 70 years. This compares with 7 per cent of the current general workforce reaching 70 years in the same time period. Similarly, by 2026, 32 per cent of the current generation of truck drivers and 35 per cent of train drivers will have reached 70 years of age, compared to 26 per cent of the current general working population. Combined with the forecast growth in freight volumes over the same period, a concerted effort is needed to recruit new drivers in order to compensate for these expected departures from the industry.

Table 3 - Estimated departures of truck drivers due to the ageing workforce (ABS, 2007)

2006			2016		•	2026	
Age Group	Proportion		Age Group	Proportion		Age Group	Proportion
15 – 24	4%	١	25 – 34			40 – 44	
29 – 29	7%	\	35 - 39		\	45 – 49	
30 - 34	11%	<b>⊢</b> \	40 - 44		┌	50 – 54	68%
35 - 39	14%	\	45 - 49	91%	\	55 – 59	00 /6
40 - 44	16%	\	50 – 54	9170	\	60 - 64	
45 – 49	15%	/	55 – 59		/	65 – 69	
50 - 54	13%	/	60 - 64			70 – 74	
55 – 59	11%	└─┐/	65 - 69		└┐/	75 – 79	32%
60 - 64	6.4%	/	70 – 74	9%	[	80 – 84	32 /0
65+	2.4%	V	75+	970	<b>V</b>	85+	
Total	100%		Total	100%		Total	100%

Table 4 - Estimated departures of train drivers due to the ageing workforce (ABS, 2007)

2006			2016		ı	2026	
Age Group	Proportion		Age Group	Proportion	•	Age Group	Proportion
15 – 24	2%	, N	25 – 34		١	40 – 44	_
29 - 29	4%	\	35 - 39		\	45 – 49	
30 - 34	5%	┌	40 - 44		┌	50 – 54	65%
35 - 39	9%	\	45 – 49	96%	\	55 – 59	03 /6
40 - 44	20%	\	50 – 54	90 /0	\	60 - 64	
45 – 49	24%		55 – 59			65 - 69	
50 - 54	20%		60 - 64			70 – 74	
55 – 59	11%	<u> </u>	65 - 69		└─ /	75 – 79	35%
60 - 64	3.9%	/	70 – 74	4%	/	80 – 84	35 /6
65+	0.0%	V	75+	4%	V	85+	
Total	100%		Total	100%	•	Total	100%

Table 5 – Estimated departures from the general workforce due to the ageing workforce (ABS, 2007)

2006			2016			2026	
Age Group	Proportion		Age Group	Proportion		Age Group	Proportion
15 – 24	16%	١	25 – 34		l	40 – 44	
29 - 29	11%	\	35 - 39		\	45 – 49	
30 - 34	11%	\	40 - 44		┌	50 – 54	74%
35 - 39	12%	\	45 – 49	93%	\	55 – 59	7 4 70
40 - 44	12%	\	50 – 54	95/6	\	60 - 64	
45 – 49	12%	/	55 – 59			65 – 69	
50 - 54	11%		60 - 64			70 – 74	
55 – 59	8.2%	<u> </u>	65 - 69		<u> </u>	75 – 79	26%
60 - 64	4.4%	/	70 – 74	7%	[	80 – 84	20 /0
65+	2.5%	V	75+	1 /0	V	85+	
Total	100%		Total	100%	1	Total	100%

This analysis of employment and demographic data from the 2006 Census indicates that both the road transport industry and rail transport industry are more reliant on an older workforce than most other industries. They have relatively fewer younger workers than other industries, particularly in urban areas. The proportion of workers approaching retirement age is quite high for all transport drivers, and in particular for train drivers. If this trend continues, the rail transport industry is likely to experience a large decrease in the number of train drivers over the next ten to twenty years as the current generation of drivers leave the industry.

## 3.4 Employment trends in the transport industry

The Labour Force Survey (ABS, 2008) indicates that employment in the road transport industry throughout Australia has been growing at a similar rate to other industries (Figure 9). Conversely, employment in the rail transport industry declined to 2000, after which it has stabilised. With concerted efforts now being made to reverse the decline in rail freight (DOI, 2007), there is an expectation of increased employment opportunities in the rail freight industry, as well as in the road freight industry. As such, the relatively old age profiles of these industries are clearly of considerable relevance.

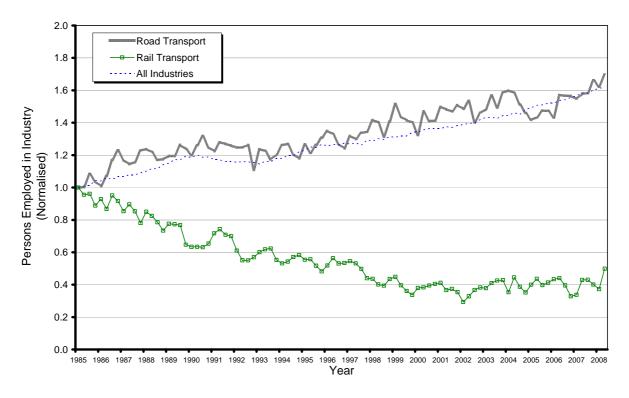


Figure 9 – Relative growth in the number of persons employed in road and rail transport industries in Australia (ABS, 2008)

## 4 Workforce issues in the T&L industry

Together with an ageing workforce, the T&L industry faces a number of workforce issues. These are most apparent in the road freight sector, which has considerable difficulty in successfully competing in the labour market. The road freight industry currently finds it hard to attract new workers and to retain existing workers (DVC, 2006). This is exacerbated by the current highly competitive labour market.

## 4.1 Competing for labour

A range of factors influence the attractiveness of an industry to prospective employees:

- the overall image of the industry
- training and career development opportunities regarding both specific and general skills
- identification of clear career pathways through the industry
- · working conditions and practices that match present day lifestyle aspirations
- levels of remuneration that are appropriate for the tasks undertaken.

These are key issues for the road freight sector, particularly given its current difficulty in attracting and retaining truck drivers. Labour shortages are not a new problem for the T&L industry, nor are they confined to Victoria. Many of these areas of concern have been identified previously (for example ATA, 2003) as opportunities for strategic intervention. By and large these issues are matters for the T&L industry to address through marketing, training and improved working conditions. Government has a role in supporting this important industry through appropriate regulation, facilitation of appropriate education programs and in some cases through coordination of information.

The rail freight sector does not appear to have the same image and attraction issues as the road freight sector. The problem for the rail freight sector in the future will be the ageing of its driver workforce and ensuring they have enough new trainees to replace those retiring. Across Australia, train drivers are expected to account for almost one-third of the shortage of between 2291 and 3282 employees in operation roles over the next 5 years (AFR, 2008).

#### 4.2 Narrow workforce demographic

Both the road and rail freight sectors have a very narrow workforce demographic, with a predominantly male driving workforce. The T&L industry presently attracts few women, or indigenous people. Some targeted approaches have been undertaken in regional or local areas in an attempt to broaden the employment base for the road freight industry. The Employment Programs Branch within the Department of Planning and Community Development and the Transport Workers Union (TWU) have already had some success with this approach in regional Victoria, specifically in the road freight sector.

An example is the "Transport Appreciation Course" held recently by the Victorian Branch of the TWU in conjunction with the Rumbalara Aboriginal Cooperative in Shepparton. This project introduced the transport and logistics industry to indigenous people, with the assistance of local transport and logistics operators.

## 4.3 Barriers to entry into the workforce

The current driver licensing schemes in Australia prevents drivers from holding an articulated truck (Heavy Combination) license until having held a car driver license for at least 24 months and a Medium Rigid or Heavy Rigid license for at least 12 months. This acts as a barrier to the recruitment of young people in the road freight sector, since school leavers will often have established themselves in other careers by the time they can be considered for truck driving. This restriction applies to any aspiring truck driver, regardless of age.

A competency based approach has been developed in the United Kingdom called the Young Drivers Scheme (DfT, 2008) and this provides an alternative model that would appear to be worthy of evaluation within the Australian context. Under the UK scheme trainee drivers are employed by a company and registered with an approved training organisation. With regular assessments and structured training, young people are able to obtain a full Category C licence (equivalent to a Heavy Rigid Licence in Victoria) at the age of 18 rather than 21 and a Category C+E (equivalent to a Heavy Combination License in Victoria) at the age of 21.

The graduated licensing scheme is primarily a safety initiative. Should consideration be given to trialling a competency based scheme in Australia, this would need to be monitored closely to ensure safety was not compromised. The chief advantage of a competency based approach to heavy vehicle licensing would seem to be in enabling those with more practical training to progress through the licensing system more quickly, although the prospect of leading to a more consistent standard of driving ability is a possible by-product.

## 4.4 Ageing workforce

Apart from the potential implications for the longer term sustainability of the T&L industry, an ageing demographic profile creates its own set of demands for the T&L industry in servicing its workforce. These demands include the need for:

- A reduction in the need for manual handling of freight
- skilled workers to service the workforce, such as occupational therapy and physiotherapy (VTA, 2007)
- increased medical testing of drivers to improve safety, productivity and longevity, and
- educational and promotion activities regarding lifestyle and health issues such as fatigue management and nutrition.

There are also likely to be some opportunities for retaining more older-age workers in future through:

- consideration of alternatives to manual handling of freight
- understanding the needs of ageing drivers and their retirement intentions
- more flexible working conditions to encourage the retention of employees approaching retirement age
- · incentives for older workers to remain in the workforce, and
- better appreciation of the value of older workers and enabling the transfer of knowledge through training and mentoring roles.

# 4.5 Regulation and changing business practices

With safety becoming an increasingly important priority for the community, the freight industry is being subjected to increasing levels of regulation. Fatigue management, Chain of Responsibility legislation, and proposals under development for national accreditation programs, have all placed demands on firms operating within the sector to become more aware of compliance issues. Consideration needs to be given to the impact of an increased

regulatory burden particularly on ancillary and small operators who generally do not have the same risk profile or the economies of scale of larger operators. The rail freight sector is already very heavily regulated in many of these areas.

Some of the changing business practices in the road freight sector include:

- many larger firms moving to convert temporary labour into permanent staff
- moving towards a more integrated service having a stronger customer focus, and
- an increased uptake of new technology across the industry.

## 4.6 Career pathways and a training culture

The changing nature of the road freight sector requires a more diverse skill set than traditionally associated with truck driving. Particularly amongst the smaller operators possessing fewer resources, workforce training and development has not necessarily been a high priority. This has resulted in fewer opportunities for career development and progression by drivers.

Education and training courses also need to be relevant to the industry's needs. Besides the core skill of driving, employees are often now seen as representatives of their organisations, requiring greater interaction with clients. Some of the new skills required in the road transport sector include:

- problem solving, customer service and interpersonal skills
- technological skills
- supervisory and supply chain management skills, and
- appreciation of regulations and compliance reporting.

Drivers having a wider skill set will be better placed to progress through the T&L industry. Having a clearly outlined career pathway for their drivers would go some way towards making the industry more attractive to prospective employees.

Whilst the rail freight sector has a well-defined training program for its drivers, this sector will also require a wider skill set to ensure depth in its workforce.

#### 4.7 Overseas migration

Truck driving is not presently recognised as a skilled occupation in demand, and so truck driving is not recognised for overseas migration purposes. There would seem to be some merit in reviewing the criteria for overseas migration to cover occupations that are essential to our continued prosperity and are in high demand. However, given the clear links to industrial relations issues, extensive consultation will be required.

## 5 The importance of workforce planning

The shortage of truck drivers and the potential future shortage of freight train drivers highlight the need for even greater attention to be given to workforce planning and development by industry, in partnership with government. Recently, the development of the Australian Logistics Council's strategic directions document (ALC, 2007) has demonstrated a commitment to address the skill and labour shortages more broadly within the T&L industry. The Transport, Distribution and Logistics (TDL) Industry Roundtable has for some years provided an avenue in Victoria for industry and State government to collaborate on issues faced by industry, and has produced a number of industry programs and resources to support the T&L industry.

The Department of Transport in Victoria is currently seeking to build on these initiatives by developing a workforce strategy, with a particular focus on truck drivers. This work has involved extensive consultation with the road freight industry and is drawing on the experience and efforts of other jurisdictions in Australia and other countries. It is also feeding into a wider workforce planning endeavour being undertaken at the national level, within the context of the development of a national transport policy framework. These efforts by government reflect the important role that the T&L industry plays in the economy and concern over the likelihood that existing labour and skill shortages will persist and possibly increase in future years. Of particular concern for government are instances where regulation and legislation may impose an unnecessary burden on industry and have the potential to limit the supply of drivers.

The research and analysis undertaken to date indicate that the most significant problem facing the road freight sector in Victoria today is that it is not successfully competing for workers in the present tight labour market. As already mentioned, there is a range of issues which influence the attractiveness of the industry to prospective employees, including industry image, training culture and career pathways, working conditions and remuneration. Given the current workforce characteristics of an ageing profile and narrow demographic, education, recruitment and retention strategies must assume utmost importance to the road freight industry. These issues are primarily the responsibility of the T&L industry to manage, with the appropriate support of governments.

The rail freight sector is not experiencing immediate driver shortages as is the case with the road freight sector. However, it is important for the rail freight sector to address likely skill and labour shortages which it will face over the next few years stemming from its ageing workforce.

#### 6 Conclusion

The truck and freight train driver workforces have relatively old age profiles and are predominantly male. The combination of an ageing profile, the forecast growth of the freight task, and the continued tightening of labour markets into the foreseeable future, is expected to cause additional problems for attracting and retaining both truck and freight train drivers. In addition, there are a range of issues which influence the attractiveness of the industry to prospective employees – including the overall image of the industry, the training culture, identification of clear career pathways, working conditions relative to lifestyle aspirations and appropriate remuneration. These issues are primarily the responsibility of the T&L industry to manage, with the appropriate support of governments.

Increasing recognition is being given to the need for workforce planning to address current and likely future labour and skill shortages within the T&L industry. These issues are clearly of vital importance to the T&L industry, since they are inextricably linked to its long term sustainability. The interest in workforce planning on the part of governments reflects the important role that the T&L industry plays in the economy. The development of strategies to address current and/or likely future labour and skill shortages also requires a sound knowledge of the structural characteristics of the respective industries and of the workforce issues involved.

The workforce strategy for truck drivers currently being developed by the Victorian Department of Transport aims to address the issues identified above, and to contribute to the wider workforce planning activities being undertaken as part of the development of a national transport policy framework.

#### References

- ABS (1999-2007). *Motor vehicle census*. Cat. No. 9309.0. Australian Bureau of Statistics: Canberra. <a href="http://www.abs.gov.au/ausstats/abs@.nsf/mf/9309.0">http://www.abs.gov.au/ausstats/abs@.nsf/mf/9309.0</a>>.
- ABS (1999-2008). *Survey of motor vehicle use*. Cat. No. 9208.0. Australian Bureau of Statistics: Canberra. <a href="http://www.abs.gov.au/ausstats/abs@.nsf/mf/9208.0">http://www.abs.gov.au/ausstats/abs@.nsf/mf/9208.0</a>.
- ABS (2007). 2006 Census of population and housing. Cat. No. 2068.0. Australian Bureau of Statistics: Canberra. <a href="http://www.abs.gov.au/ausstats/abs@.nsf/mf/2068.0">http://www.abs.gov.au/ausstats/abs@.nsf/mf/2068.0</a>.
- ABS (2008). *Labour force, Australia, detailed, quarterly*. Cat. No. 6291.0.55.003. Australian Bureau of Statistics. <a href="http://www.abs.gov.au/ausstats/abs@.nsf/mf/6291.0.55.003">http://www.abs.gov.au/ausstats/abs@.nsf/mf/6291.0.55.003</a>.
- AFR (2008). *Rail job shortage here for long haul*. Christopher Jay, 13/06/2008, page 65, Australian Financial Review.
- ALC (2007). Contribution of transport and logistics to the economy: Dispelling the myths. Australian Logistics Council: Robina, Queensland. <a href="http://www.austlogistics.com.au/">http://www.austlogistics.com.au/</a>>.
- ATA (2003). Driving Australia's future: A report and action plan addressing the skills needs of the road freight transport industry. Report of the National Industry Skills Initiatives Working Group, August 2003. Australian Trucking Association and Department of Education, Science and Training: Canberra. <a href="http://www.atatruck.net.au">http://www.atatruck.net.au</a>.
- BTRE (2002). *Greenhouse gas emissions from transport Australian trends to 2020.* Report No. 107, Bureau of Transport and Regional Economics, Department of Transport and Regional Services: Canberra. <a href="http://www.bitre.gov.au/publications/93/files/r107.pdf">http://www.bitre.gov.au/publications/93/files/r107.pdf</a>>.
- BTRE (2003). *An overview of the Australian road freight transport industry*. Working Paper No. 60. Bureau of Transport and Regional Economics, Department of Transport and Regional Services: Canberra. <a href="http://www.bitre.gov.au/publications/77/files/wp60.pdf">http://www.bitre.gov.au/publications/77/files/wp60.pdf</a>>.
- BTRE (2006b). Freight measurement and modelling in Australia. Report No. 112, Bureau of Transport and Regional Economics, Department of Transport and Regional Services: Canberra. <a href="http://www.bitre.gov.au/publications/76/files/R112.pdf">http://www.bitre.gov.au/publications/76/files/R112.pdf</a>>.
- DfT (2008) *Young Drivers Scheme*. Department for Transport: London, UK. <a href="http://www.dft.gov.uk/pgr/freight/archive/rhmf/youngdriversscheme">http://www.dft.gov.uk/pgr/freight/archive/rhmf/youngdriversscheme</a>>.
- DOI (2007). Switchpoint: The template for rail freight to revive and thrive. Final report of the Victorian rail freight network review. Department of Infrastructure: Melbourne.
- DVC (2006). *Regional skills shortage survey*. October 2006. Department for Victorian Communities: Melbourne.
- VTA (2007). *On-site physio: A blinding flash of the obvious*. Priority Report 29. Victorian Transport Association: Melbourne. <a href="http://www.vta.com.au">http://www.vta.com.au</a>.