DRIVER RECRUITMENT/RETENTION IN THE HEAVY TRUCK TRANSPORT INDUSTRY

Prepared for the

- Road Transport Forum NZ,
- New Zealand Forest Owner's Association Inc.
- Log Transport Safety Council

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EXECUTIVE SUMMARY

There is currently an estimated shortage of over 1,250 truck drivers or 5.5% of the drivers required to move the country's goods on the road. This shortage is placing considerable pressure on existing drivers and the industry as a whole with existing trucks under-utilised and truck purchasing being delayed. The industry is able to recruit enough drivers to replace those that leave through normal attrition but is unable to recruit additional drivers to meet the increasing demand for freight transport. An annual growth in transport demand of 4% per annum over the past 5 years is 1.6 times the growth in GDP. This is consistent with the European experience that transport grows by 1.5% for each 1% growth in industry production.

Unless action is taken to meet the increasing shortfall the driver shortage will grow to a cumulative shortage of over 4,000 within 3 years (by the end of 2005) and about 10,000 by 2010. This would have a major impact on the New Zealand economy, especially as the level of skill required to be a driver is similar to those required by a number of other sectors in the economy who are also experiencing major labour shortages.

The report quantifies the driver shortage and presents the findings of two surveys of key groups of people in the industry. The surveys were aimed at identifying the underlying causes of the driver shortage and what actions are required to address the problem. A number of strategies aimed at improving driver retention and recruitment were developed. These strategies can be grouped as follows:

- Strategies that will solely improve truck driver recruitment.
  These strategies are aimed at:
  - making entry into the industry more affordable for potential new recruits
  - making entry into the industry faster
  - improving the percentage of trainees who successfully complete their training programme and subsequently become proficient drivers.
  - making entry into the industry easier for new truck driver recruits by providing them with work experience opportunities
  - ensuring potential recruits have the essential skills or attributes required to become good truck drivers
  - reducing the demand for new drivers through productivity improvements

- Strategies that will solely improve truck driver retention.
  These strategies are aimed at:

- improving truck maintenance in order to avoid drivers having to use badly maintained or illegal vehicles
- reducing the pressure on drivers to drive in breach of the regulations
- targeting enforcement action on persistent offenders and generally improving driver and operator understanding of the legal requirements
- avoiding presenting drivers with illegal loads to haul
- avoiding presenting drivers with tasks that are impossible to perform without breaching the regulations
- reducing the level of dangerous overtaking especially of trucks and in the face of on-coming trucks
- improving the communication of new regulations to drivers and others concerned in order to reduce inadvertent breaches

• Strategies that will bring improvement to both recruitment and retention.

  These strategies are aimed at:

  - improving the industry's image, making entry into the industry more attractive to new recruits and more attractive for existing drivers to stay
  - providing a career path for existing drivers that recognises differing levels of skill required to drive, for example, off-highway log trucks
  - achieving remuneration that is perceived by drivers as being adequate or good
  - achieving employment conditions that are perceived by drivers as being adequate or good
  - improving management culture to avoid workplace dissatisfaction.

The report proposes four prioritised major initiatives for future action to take forward these strategies:

Highest priority.

A. Initiative to enhance the truck driver recruitment and training process (11.1).
B. Initiative to improve pay and conditions in the truck transport industry (11.2).

High Priority

C. Initiative to improve the standing of the industry and of truck drivers (11.3).
D. Initiative to reduce the demand for drivers through productivity improvements (11.4)

Finally, the report concludes that the driver shortage is not an issue the industry will be able to solve on its own. Many of the issues are beyond the control of the industry, including the attributes of potential recruits and the driver licensing requirements. The shortage of skilled labour is a problem for a number of other sectors in the NZ economy as well, for example the marine, forestry and building sectors. It is recommended that, as the next step, the report findings should be discussed with the relevant government agencies that are in a position to help address the driver shortage. These agencies and their potential roles include:

Department of Labour

A review of the Department of Labour's responsibilities has highlighted the key role they may be able to take in overcoming some of the obstacles the industry faces with driver recruitment and retention. In particular, they should be able to help with the important issue of the level of entry skills required for truck driving and supporting driver training and recruitment initiatives.

LTSA

The two key areas where LTSA needs to take a leading role are in:

1. Accelerating the process of obtaining a class 5 licence and extensions.
2. Ensuring drivers understand the importance of safety, the legal requirements (especially new requirements) and what is expected of them.

NZ Police CVIU

It is recommended that the findings of this report be discussed with senior CVIU staff, MOT and Government Ministers to explore ways in which a greater emphasise can be placed on encouraging willing compliance rather than the current focus which is primarily on the issuing of infringement notices and fines. The effective targeting of persistent offenders is also seen as a priority.

MOT

MOT's "business is to make sure there is an affordable, integrated, safe, responsive and sustainable transport system for New Zealand by 2010". Clearly the driver shortage is a major impediment to ensuring that this happens. It is recommended that the report be sent to MOT and a meeting arranged to discuss ways in which Government can help to overcome the driver retention and recruitment problem the industry faces.

WINZ and Skills NZ

These agencies also have a role to play in addressing the driver shortage problem through supporting training and other initiatives.

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1 BACKGROUND AND INTRODUCTION

There is strong evidence that shows that the heavy truck transport industry is facing a growing and serious shortage of trained drivers. This problem is not unique to this industry, but is shared by the passenger transport industry, as well as many other sectors of New Zealand industry. The heavy truck transport industry is concerned that this shortage of drivers, unless checked, will have a serious adverse affect on the ability of the industry to service the growing demand in New Zealand for efficient and economic transport of goods by road. It could also have worrying implications for the welfare of existing drivers and for road safety due to increased pressures and demands on drivers, as well as placing added pressures on truck transport businesses to run efficient operations.

This investigation was commissioned by Road Transport Forum NZ (RTF), New Zealand Forest Owner's Association (NZFOA) and Log Transport Safety Council (LTSC) to provide an overview and assessment of the driver shortage problem from a truck transport industry perspective, and to recommend a coordinated and prioritised program of action to address the shortage. The Terms of Reference for this joint project merged the similar work that was separately being considered by the RTF and the NZFOA/LTSC. Merging of these proposed separate projects avoided duplication of effort, helped to ensure that the resources available to the truck industry as a whole were used effectively and efficiently, and avoided conflicting initiatives or counterproductive outcomes. No other related projects within the heavy truck transport industry were identified during the life of this project.

The Project Leaders originally identified for the two separate initiatives (Ron Oliver of Oliver Hatton Limited for the RTF initiative and Peter Baas of TERNZ Limited for the forestry industry initiative) worked closely together in leading the joint project, with Ron Oliver providing the overall leadership and co-ordination role and Peter Baas leading the investigation and analysis aspects of this Project.

2 OBJECTIVES

The primary purposes of this investigation were to:

1. Identify the key current and future issues facing the transport industry in general regarding retention of experienced drivers and the adequate supply of suitable driver recruits to the industry. The forestry and dairy sectors were treated as case studies for the investigation aspects of this study.

2. Develop, in consultation with the industry, an outline program of action to manage these issues.

In particular, the study:

a. Quantifies current and future New Zealand and forestry industry truck driver demand requirements and supply availability.

b. Identifies current and future issues related to these demand requirements / supply availability and the underlying systemic causes of these issues.

c. Makes recommendations for the future management of these identified issues and proposes a plan of action to address their underlying causes.

3 SCOPE

3.1 Demographic Coverage

The focus of this study is New Zealand's heavy truck transport industry driver demand requirements and supply availability across New Zealand. The study takes account of driver migration within the trucking industry from sector to sector, and loss to other sectors of the economy. Overseas migration was not investigated, as it was not identified as a material issue during the investigative stage of this project.

3.2 Industry Sectors

The heavy truck transport industry in general, and the forest transport sector in particular, are the key areas of focus for this project. Competition with other road transport sectors (such as the taxi, bus and coach sectors), and with other industry sectors, was found to be a factor in the availability of drivers to the heavy truck sector. This project did not investigate the retention and recruitment initiatives being taken by the other non-truck related transport sectors.

3.3 Organisations and People

The project interacted with or involved the following stakeholders:

- Road Transport Forum New Zealand (Inc.) (RTF)
- NZ Forest Owner's Association Inc. (NZFOA)
- Log Transport Safety Committee (LTSC)
- Department of Labour
- Forest owners / forestry companies
- Heavy truck transport companies
- Transport Customers
- Freight Forwarders
- Heavy truck drivers
- Partners and others associated with drivers
- NZ Road Transport and Logistics ITO
- Land Transport Safety Authority (LTSA)
- Transport Engineering Research New Zealand Ltd
- Skills New Zealand
- Work and Income NZ
- Driver training providers

3.4 Time Span to be considered

A principle aim of this project is to propose a co-ordinated action plan to be implemented over the next few years. However, to ensure that this action plan has long term benefits and takes account of future developments affecting demand for, and supply of, trained drivers within the industry, it also:

1) Identifies the long term (at least 10 years) and underlying systemic causes of changes in demand and supply; and
2) Considers medium to long term (next 10 years) trends in likely demand for trained drivers and makes projections over the same period of the actions required by the industry to address the anticipated supply problems.

4 METHODOLOGY

The project was split into four stages to provide a transparent working structure to the project, to aid reporting and to help the Steering Group to provide direction.

Stage 1 - Investigative
Stage 2 - Analysis
Stage 3 - Initiative Development and Scoping
Stage 4 - Development of Prioritised Action Plan

Within this framework the following were determined:

1. Truck driver turnover, number of drivers per vehicle and other data on typical truck operations.
2. The estimated shortage of drivers
3. The views of heavy truck drivers, truck transport operators and other key groups within the industry

4.1 Survey of transport operators

4.1.1 Survey method

A random telephone survey of transport operators was conducted during August and early September 2002 throughout New Zealand. The survey used telephone numbers taken at random from the RTF and LTSC membership databases. This survey was supplemented by asking delegates at the RTF Conference in Nelson in September 2002 to also complete the survey questionnaire if their company had not already been surveyed during the random telephone part of the overall survey. The survey questionnaire is shown at Appendix G.

4.2 Quantifying the shortage of drivers

The Shortage of drivers was estimated, using the methodology shown in Figure 1 below:

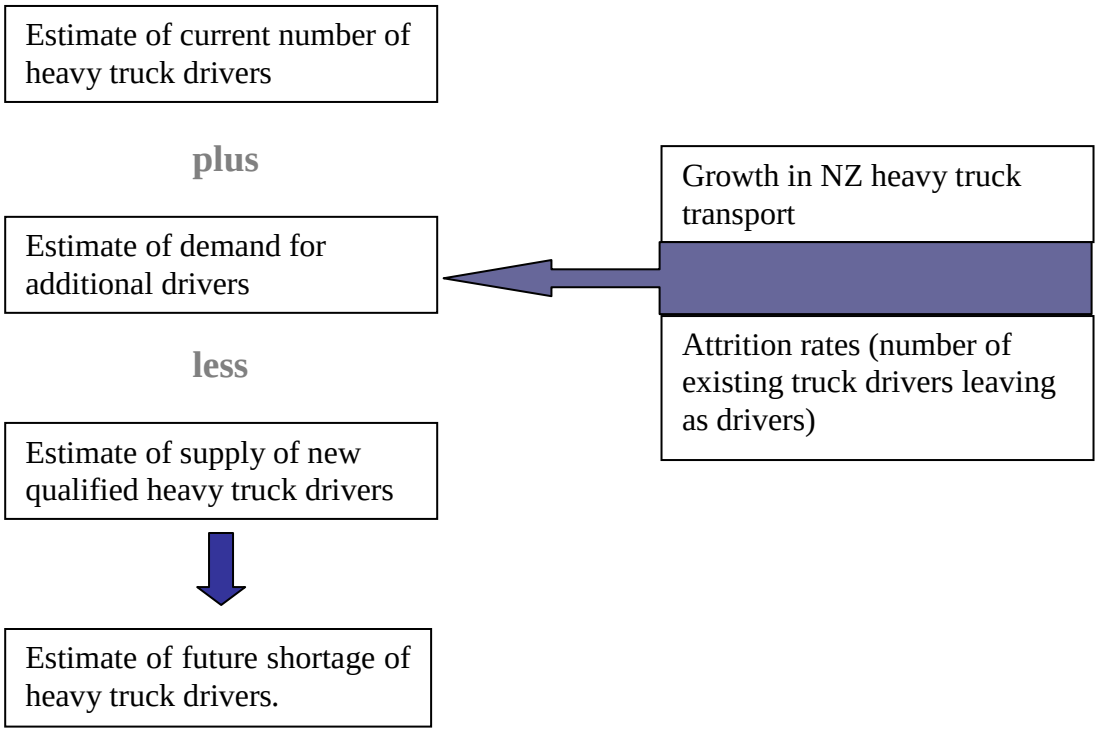


Figure 1 – Methodology for estimating the future shortage of heavy truck drivers

Overall growth in New Zealand heavy truck transport was forecast by estimating the general growth in the heavy truck transport industry adjusted to take account of significantly different growth projections in specific sections of that industry. This is shown diagrammatically in Figure 2 below:

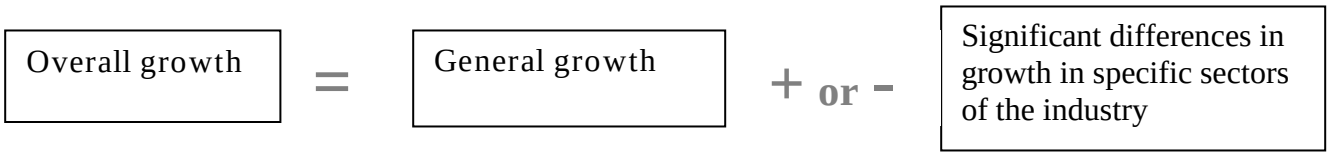


Figure 2 – Methodology for estimating overall future growth in New Zealand Heavy Truck Transport

4.3 Views of drivers and other key groups within the industry

4.3.1 In-depth interviews

A survey of heavy truck drivers and other key groups in the heavy truck transport industry was conducted between May and October 2002 in the North and South Island of New Zealand. It comprised semi-structured in-depth face-

to-face interviews with 212 heavy truck drivers, ex-drivers, people in contact with drivers and potential driver recruits. Interviews took place in the workplace and on the job (i.e. in operations' offices, depots, drivers' smoko - rooms, in port terminals and depots, on the roadside, in truck cabs or in drivers' homes).

The objective of the survey was to identify key workforce issues and gain an understanding of their significance, with particular attention to management practices, pressures on drivers, industry image, career path and progression within the industry, pay rates, conditions of employment, health and safety, consistency of work, hours of work / social description, enforcement issues, gender issues, license / license endorsement cost and time requirements, initial training opportunities, need for apprenticeship and other training schemes, industry provision of training opportunities, and ideas on attracting suitable recruits.

Hand-written interview notes of informants' responses were taken during the interviews and later transcribed for analysis. The initial output from the in-depth interviews investigations was a body of more than 40,000 words of transcribed informants' responses.

4.3.2 Overview analysis of issues

The interview transcriptions from the survey of key groups in the heavy truck transport industry were analysed using discourse analysis methodology[1] to identify significant themes and issues. The output from this analysis was a comprehensive list of issues as discussed by drivers and those associated with drivers, expressed in their own terms.

4.3.3 Systems governing demand requirements and supply availability of suitable, skilled and qualified truck drivers

An analysis of the issues was conducted, drawing on ZOPP Logical Framework Analysis methodology.[2] The ZOPP methodology analyses stakeholder issues in order to arrive at strategies for their solution by first constructing a "problem-tree" of issues ordered into cause-effect chains around a 'core' issue, to which all others are linked either as causes or effects. These *linked issues* in the problem-tree were reframed as 'negative states', and then used to derive a corresponding set of *linked objectives*, each aimed at changing a particular negative state into a positive state. The output from this analysis was a clear definition of elements of a "positive view" of the industry, to guide development of strategies in response to the issues that had been identified.

[1] A technique designed to reveal key words and concepts that structure a discussion.

[2] See NORAD (1990), World Bank (1996) and Development Cooperation Division (1996) on Objectives-oriented Project Planning / Logical Framework Analysis.

In this way the analysis moved in a structured and systematic fashion from the set of issues identified in the investigative phase, to a vision and a set of strategic objectives to begin addressing those issues.

The output from this analysis included a series of maps showing components, and interaction among the components, of

- systems that affect recruitment and retention of drivers (see Section 8);
- positive visions for enhanced driver recruitment and retention (see Section 9); and
- strategies to achieve those visions (see Section 10).

4.3.4 Assessment of the impact that improved company (operator) performance has on driver recruitment and retention

A review was conducted of the systems identified as governing driver issues, to assess what proportion of these issues would be addressed by improved *operator* performance (see Section 10.5).

5 FINDINGS FROM TRANSPORT OPERATOR SURVEY

5.1 Survey Questionnaire and Statistics

Appendix G shows the questionnaire used for the telephone survey and during the workshop sessions of the RTF Conference in Nelson in September 2002. This questionnaire was designed, following consultation with key people in the industry, to collect quantitative information on employment patterns in the truck transport industry and qualitative information on the views of a large sample of operators in the industry, on their experiences in driver recruitment and retention.

Appendix H gives the statistics for this survey and the results of a quantitative analysis of its findings. Overall, 189 questionnaires were completed during the survey, with 90 of these being completed as a result of the random calls to operators in the truck transport industry. The remaining questionnaires were completed by some of the delegates who attended the Conference workshop sessions.

The success rate for the telephone part of the survey was about 33%. Two-thirds of the operators telephoned said that they were too busy to spare the 5-10 minutes required to answer the questions during the telephone call, despite most operators knowing the status of the survey and appreciating its importance for the industry. It is doubtful whether this rather low success rate skewed the findings of the survey, but this possibility should be borne in mind when considering the implications of the results.

Similarly, the questionnaires completed during the Workshop sessions at the Conference must be considered to be biased towards operators with the characteristics that result in their becoming members of the RTF and attending its Conferences. These biases may have skewed the results of the quantitative analysis of the findings of the survey but are unlikely to have had a major influence on the findings of the qualitative information that came out of the survey.

These findings featured a number of strong themes and core issues, with very few operators having conflicting views or experiences. The significant matching of the findings of the in-depth interviews survey with the findings of this survey provide confidence that the findings can be used as major inputs into the recommended initiatives and actions developed in the later stages of this project.

5.2 Summary of qualitative findings of operator survey

5.2.1 Is there a driver shortage in New Zealand?

Almost overwhelmingly it was felt that there is a driver shortage, although a considerable number of operators felt that there is only a shortage of good drivers. There would appear to be a large number of "cowboy" operators and mediocre drivers around and those who are inexperienced and unable / not willing to stay in a job for long. It was frequently said that these "cowboys" give the industry a bad reputation and thus the job doesn't have a positive image.

5.2.2 What are the reasons for a driver shortage?

A multitude of reasons were given for the driver shortage:

5.2.2.1 Low Pay Rates

It is considered that the low pay rates are a significant contributory factor. This stems initially from the low rates received by the employer that seem to be a general problem within the industry. "If rates were put up to a reasonable level, then wages could go up accordingly". However, other companies stated "we pay our drivers between $15-20 per hour and have no trouble getting top men".

5.2.2.2 The licensing system

It was felt strongly that this needs changing. It was felt that the graduated driver licensing system is too complex and that there is a lack of good training opportunities. Qualification requirements make entry into the industry difficult and there is a need for financial assistance to gain qualifications / experience.

5.2.2.3 Compliance & pressure/inflexible hours

It was strongly felt that fines and penalties are too severe and that the rules and regulations are too harsh. It was frequently cited that the CVIU is too hard on drivers; that there is no recognition of the importance of the industry by the government; that drivers are often made scapegoats in the supply chain industry and that pressure by suppliers to maintain tight time frames can be unrealistic.

Suspension of driver's for a single offence frequently led to them loosing their job because transport operators could not afford to employ unproductive drivers. This was seen as a major injustice – it being said that even professionals such as doctors - whose actions could place human life

directly at risk – were not subject to the same threat of suspension for a single mistake.

5.2.2.4 Inflexible working hours

5.2.2.5 Work pressure on drivers (e.g. just-in-time deliveries)

Young people don't want to work the 70 hours per week expected of them. Nor do they want the inflexible work hours e.g. nights, weekends.

5.2.2.6 Lack of encouragement from schools

Schools are encouraging pupils to be more academic and are presenting the industry as an undesirable lifestyle. Young people are not interested in spending years training, when they can earn good money immediately. Parents aspire to their children doing better than becoming a truck driver.

5.2.2.7 OSH/ACC rules

Changes to the OSH & ACC rules now prohibit youngsters "off-siding" and growing into the business. Previously many young people grew up around trucks whilst helping their fathers and by the time they were of an age to drive had considerable off-siding experience and naturally moved into driving trucks. In addition the rules no longer allow for a family to ride in the cab with the driver – hence no longer encouraging children or allowing the family to share and experience more of the truck driver's life.

5.2.2.8 Working conditions for drivers

It was also commented that in particular, the forest companies need to improve working conditions for their drivers.

5.2.2.9 Loss of drivers to overseas markets

Finally it was commented that a lot of drivers are lost to the overseas market, primarily in the USA and Australia.

5.2.3 Reasons for drivers leaving

Operators said that drivers left for a variety of reasons. Those most frequently cited are: to go to another driving job; being poached (primarily by the dairy companies); to go to overseas driving jobs mainly in the US and Australia; for health reasons; for home related pressure; because they don't like the night shifts; to go to another job and in several cases, because the driver has reached his maximum demerit points.

5.2.4 Method of recruiting employee drivers

Recruitment tends to be mainly by word of mouth; sometimes from lists of potential drivers wanting jobs (this seemed to be the case with companies who were more willing to accept any level of driver) and from newspaper advertising. "Good" companies generally felt that their reputation for looking after their staff resulted in them having a potential waiting list derived from people recommended by existing drivers; some also had staff incentive schemes to help find suitable drivers.

5.2.5 Key criteria sought when engaging new drivers

Criteria varied, depending considerably on the type of company recruiting. Some were just looking for anyone willing and able to do the job, however most cited experience, qualifications and driving history as very important, together with holding of relevant licences (e.g. dangerous goods; forklift etc.). Some required experience with truck and trailer rigs. Many also cited presentation (being clean and tidy), personality, and attitude to the job as important criteria. Some felt that working as part of a team was a high priority and others felt that the ability to work alone and to be aware of the long hours and involvement required were high on their lists. Potential and the ability to be trained as a good driver were seen as important factors. Reputation, honesty, trustworthiness, loyalty, a sense of responsibility, keenness and a love of driving were also held to be important. Finally, a number of operators cited stability as a key criterion, giving preference to a married man with children or in a stable relationship and with a mortgage to pay, since these people were seen as more reliable and likely to stay in the job.

5.2.6 What action can be taken to improve the situation?

5.2.6.1 Responsibility for action

Operators generally felt that there is a lot that could be done to improve the situation, but weren't generally very interested in getting involved themselves. Some felt that others who gain from the industry (e.g. manufacturers) should help and provide funding to alleviate the shortage problem. Some believed that student loans should be made available for trainees. A comment was made that we "should let experienced 21 year olds with a transport background and a good attitude, go straight to a Class 5 licence".

5.2.6.2 Compliance, attitude & philosophy

It was frequently stated that the CVIU should have a more humane approach towards their task; that the industry should address the bureaucracy of regulations, documentation, speed laws, health & safety requirements, and the attitude of clients to health and safety, and encourage client provision of efficient loading and unloading systems. Clients should also be encouraged to use efficient documentation systems.

5.2.6.3 General speed limits

It was also felt that the speed limit for heavy vehicles should be standardised to 90km and that the demerit points system should be improved. The use of the fixed site Safety Cam system used in NSW was supported for truck speed enforcement.

5.2.6.4 Public awareness

It was felt that something should be done to improve the attitude of the general public to trucks on the road - a major publicity campaign to train the general public how to interact with trucks.

5.2.7 Promotion of the industry

Overwhelmingly operators felt that the industry should be actively promoted within schools to target school leavers and encourage the idea that driving is like an apprenticeship with a long-term goal of being a top professional driver in a rewarding career. There should be a driver cadet scheme and incentives for new recruits to stay within the industry (e.g. subsidised licence costs if the driver stays in the industry). Currently it is felt that there is a lack of information available, that the industry needs to demonstrate confidence and a positive attitude and go out and sell itself. It would also benefit from promoting the industry to female drivers who currently number very few within the industry.

Overall, it is felt that the industry has to help itself by targeting the young people before they leave school and provide financial ways of helping people through their training so that they are encouraged to train for their licences, rather than being lost to other industries.

Driver resignation findings

The 189 transport operators that were surveyed employed, either directly or as subcontractors, 5,951 drivers and had on the road 6,095 trucks during the previous 12 months.

During that 12-month period 834 drivers resigned. This is 14% of those employed or on subcontract. Table 1 shows the turnover for different sectors in the industry.

Turnover	Percent
Line Haul	16.8
Livestock	10.4
Logging	14.9
Bulk	18.5
General freight	19.1
Local delivery	13.9
All operators surveyed	14.0

Table 1 – Turnover for different sectors of the truck transport industry

The companies surveyed currently have 299 vacancies, which represents 5.5% of their driver workforce. Over the next 5 years they estimate that they will need 1,147 additional drivers, which represents an annual growth rate of approximately 3.9%

They also estimate that they will need an additional 545 drivers in the next 12 months, or 9% of their current driver workforce. This corresponds to the addition of the expected annual growth of 4% plus the current shortage of 5%.

Figure 3 and table 2 shows the different reasons for leaving. Multiple reasons were given in some instances while in other cases no reasons were given. Consequently the following figures should only be used to indicate the relative importance of different reasons for leaving.

The combined total score for the 'hours and conditions' combination of "Reduce working hours" (26), "Improve working conditions" (21), "Work-related stress" (17) and "Regular working hours" (16) is 80 compared to the score of 116 for "Increase wages". Pay rates is clearly an important factor but from the comments and the in-depth interviews, is not in isolation to the concerns about

the hours of work. While there is some loss of drivers to overseas employment, (a score of 29), they make up only 4% of the drivers who are leaving.

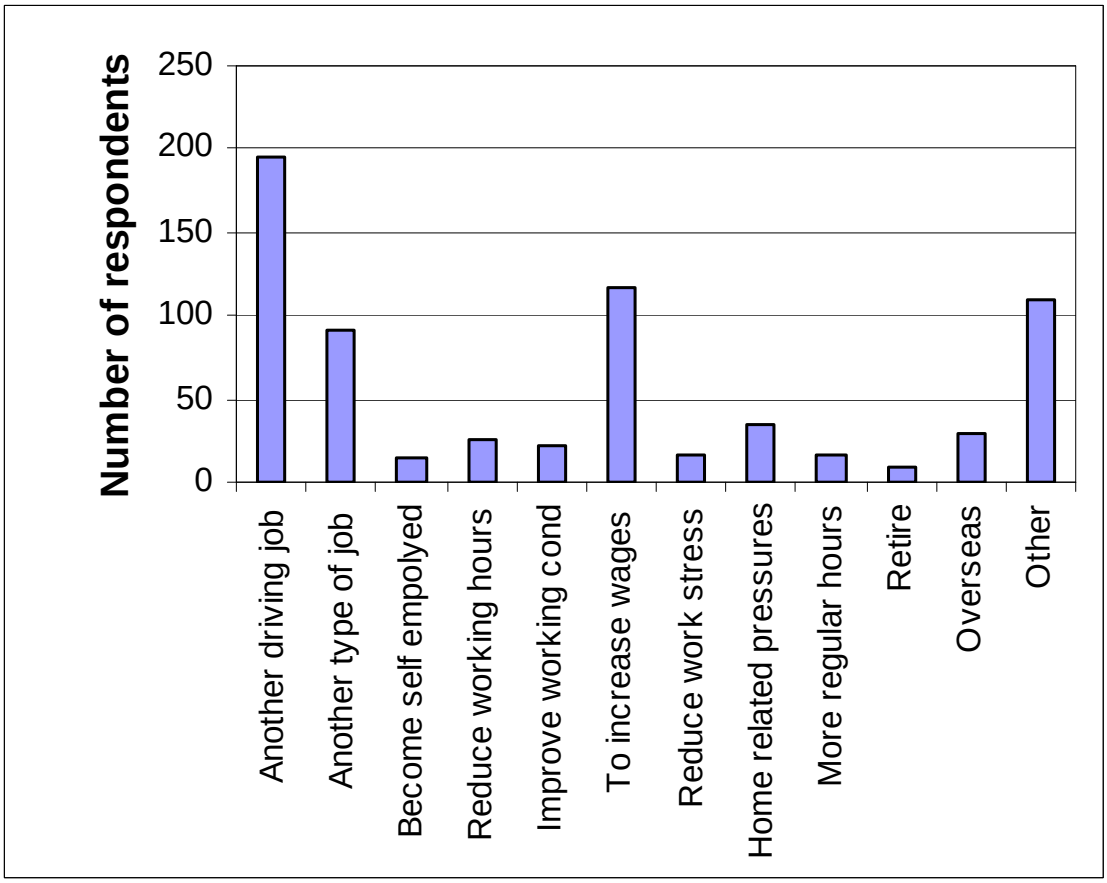


Figure 3 - Comparison of different reasons for leaving. Some respondents gave more than one reasons for leaving.

	To go to another driving job?	To go to another type of job?	To become a self employed driver?	To reduce working hours?	To improve working conditions?	To increase wages?	To reduce work-related stress?	Because of home-related pressures?	To get more regular working hours?	To retire?	How many vacancies do you currently have for employee drivers ?
Line Haul	5.4%	1.8%	0.3%	0.3%	0.7%	3.1%	0.7%	0.9%	0.9%	0.1%	8.5%
Livestock	2.4%	0.8%	0.2%	0.3%	0.3%	0.9%	0.1%	0.1%	0.3%	0.1%	4.6%
Logging	5.2%	1.5%	0.7%	0.4%	1.7%	3.1%	1.3%	1.2%	0.6%	0.7%	5.1%
Bulk	4.7%	2.6%	0.3%	1.6%	0.0%	5.4%	0.3%	0.5%	0.0%	0.0%	7.5%
General	2.6%	9.1%	0.0%	0.0%	0.0%	0.4%	0.0%	0.9%	0.0%	0.0%	6.9%
Local delivery	1.6%	0.8%	0.0%	2.4%	0.0%	0.0%	0.0%	2.4%	0.0%	0.0%	12.0%
Industry average	3.9%	1.8%	0.3%	0.5%	0.4%	2.3%	0.3%	0.7%	0.3%	0.2%	5.5%

Table 2 - Reasons for leaving by sector as a percentage of the drivers employed in that sector. Some respondents gave more than one reason for leaving.

The shaded areas highlight the higher values in each column. Of note is:

- The high vacancy rate in the local delivery sector.
- The similarities between the line haul and logging sectors regarding reasons for leaving.
- The high percentage (9.1%) of General freight drivers leaving for other types of work compared to the other sectors.
- The higher proportion of log truck drivers retiring compared to the other sectors suggesting an older workforce.
- A greater proportion of drivers leaving to obtain more regular hours of work in the line haul and logging sectors compared to the other sectors.
- The higher rate of drivers leaving due to low wages in the bulk transport sector compared to the other sectors.

6 ESTIMATE OF THE FUTURE SHORTAGE OF DRIVERS

6.1 Estimate of the shortage of qualified heavy truck drivers

The following provides an estimate of the expected shortage of truck drivers. In calculating the shortage a number of assumptions had to be made:

- It was assumed that the number of full time professional truck drivers equals 22,686, the number of people who filled in the 2001 Census occupation field of "Heavy Truck or Tanker driver". This is likely to be an underestimate as there will be drivers who used an occupation class related to the industry sector they work in, such as construction. This estimate closely aligns with the number of combination vehicles (21,391). From the survey of transport operators (section 5 above) it was found that there was essentially one truck per driver (5,951 drivers for 6,095 trucks). While not all combination vehicles are in full time active use, there are a large number of single unit trucks that are.

- The number of Class 5 HT licences that were issued between July 1999 and June 2002 was extrapolated to determine the expected number of Class 5 licences in the future. (See Appendix A).

- An annual attrition rate of drivers leaving the industry of 7.4% has been used. This rate is based on the estimated length of service of drivers who participated in the Survey of Truck driver fatigue and Fitness for Duty undertaken by TERNZ in 2000 [Charlton, 2000 #4]. The survey of transport operators undertaken as part of this project (see section 5 above) found that 14% of drivers left the companies surveyed in the last 12 months. This 14% included leaving from another driving job and to stop driving.

- An annual transport sector growth rate of 4% has been assumed. This is based on the growth over the next five years estimated by the operators who participated in the survey (see Section 5 above). It is also consistent with the growth rate of 4.05% calculated using the European research findings of 1.5% transport growth for each 1% growth in national production. The average growth of primary and manufacturing production in New Zealand for the period 1995 to 2000 has been 2.7%, which when multiplied by 1.5 equates to 4.05% transport growth.
- An additional figure has been added to account for the extraordinary "wall of wood" related growth in the forestry sector that is in addition to normal transport growth. The forestry sector is expected to grow by at approximately

8% p.a. over the next three years and then reduce to be closer to the national average.

Year	Estimated number of drivers	New Class 5 licences	Loss through attrition 7.4%	Transport growth 4%	Additional forest sector growth 4%	Annual Shortage of drivers	Cumulative TOTAL Shortage of drivers
2001	22686	1056					
2002	23593	1020				1,298 (See note)	1298
2003	24537	1200	914	981	145	841	2139
2004	25519	1217	951	1021	128	882	3021
2005	26539	1233	989	1062	169	986	4007
2006	27601	1250	1028	1104	165	1048	5055
2007	28705	1266	1069	1148	161	1113	6168
2008	29853	1283	1112	1194	158	1181	7349
2009	31047	1299	1157	1242	154	1253	8602
2010	32289	1316	1203	1292	150	1328	9930

Table 3: Estimated driver shortage.
Note: Based on the 5.5% job vacancy rate from the operator survey reported in Section 5 above.

The shortages shown above are for each year. The cumulative shortage is also shown. If the annual shortages are not made up, then they will accumulate resulting in a shortage of over 4,000 within 3 years (by the end of 2005) and 10,000 within 8 years (by the end of 2010).

The annual shortage is slightly less than the number required to meet the expected growth in transport demand. This would imply that the industry is able to recruit enough drivers to replace those that leave but is not able meet the demand generated by the growth in the economy.

An estimate of the shortage of log truck drivers by region is provided in Appendix A.

7 ISSUES RAISED DURING IN-DEPTH INTERVIEWS

7.1 Survey Statistics

Appendix B provides the statistics on the in-depth face-to-face interviews. Of the 212 interviews carried out, 81 were in the North Island and 131 in the South Island. Men represented 141 of the 143 drivers who were interviewed.

A good spread of interviews with transport operation managers and other people in contact with drivers was achieved. The log transport sector represented 72 of the total of 212 interviews as this was seen as a particularly important sector in view of the background to this study. However, there was also a good spread of interviews over the other key sectors in the transport industry as a whole.

7.2 Key findings from the survey

The results of the interviews were analysed in terms of the following issues. Results specific to the log transport, stock and dairy sectors are outlined in Appendices C, D and E respectively.

1. Recruitment and Retention
    - Shortage of labour
    - Reasons to stay or quit
    - Not enough hours
    - Pay and conditions
    - The long hours
    - Vicious cycle (shortage → increased driver stress → resignations → even greater shortage)
    - Fear of having an accident
    - Overuse of remaining staff

2. Management Practices
    - looking after drivers
    - driver "say" in their day

3. Work place issues

4. Pressure on drivers
    - hours of work
    - fear of accident

- compliance pressures

5. Industry Image
6. Career path and progression within the industry
7. Pay rates
8. Health and Safety
9. Consistency of work
10. Hours of work
11. Enforcement issues
12. Gender issues
13. Licence / licence endorsement cost and time requirements
14. Initial training opportunities
15. Need for apprenticeship and other training schemes
16. Industry provision of training opportunities
17. Ideas on attracting suitable recruits.

7.3 In–depth interviews with key groups within the transport industry

The following is a summary of the comments made by the various people that were interviewed. The comments have been grouped to reflect the main issues that were raised and the issues identified in the project brief. The comments are largely quotes and consequently reflect differing views in the industry.

7.3.1 Recruitment of new drivers

The research focus on 'issues and problems that affect recruitment of new drivers' was re-framed within an 'aspiring driver'-focused perspective as 'factors that lead an aspiring driver to choose another career path'.

The research identified a set of interrelated barriers that contribute to aspiring drivers abandoning the aim to 'become a truck driver' and seeking other careers:

- Takes too long – can't drive big trucks until later so can't find paying work during 6-month periods, can't afford to pay a training provider for a course to cut the time short;

- Costs too much - course and licence / endorsement fees seen as expensive, can't find the money to pay, no student loan scheme available for driver training; and

- 'Catch 22' - a vicious circle can lock new licence holders out of the industry for up to several years as they cannot get a job without experience, and cannot get experience without a job.

The combination of these barriers, coupled with the fact that pay rates are relatively low compared to other career options, mean that only some of these aspiring truck drivers get through and become professional drivers, while others put their aspirations in the 'too hard' basket and choose other career paths.[3]

7.3.2 Retention of experienced drivers

The research focus on 'issues and problems that affect retention of experienced drivers' was re-framed within a driver-centred perspective as 'factors that lead an experienced driver to look for another job'.[4]

Drivers' complaints about job-related issues fell into five major 'areas of dissatisfaction':

- Poor rewards;

- Meagre conditions;

- Equipment (Trucks);

- Work place issues; and

- Compliance pressures

7.3.3 Availability of alternative employment opportunities

Whether a driver does look for another job will also depend on what alternative employment is available to that driver in, or accessible from, his / her present home location. Factors that contribute to a driver having more alternative

[3] See Section 8 for a detailed analysis of links among these issues
[4] For the full analysis see Section 8.

employment opportunities, and so make it easier for a driver to find other employment, include:

- *City location* – cities have more businesses and hence offer more job opportunities than small country towns; and

- *Licences /endorsements current* – drivers that have all relevant endorsements current, such as forklift, dangerous goods, etc., are suitable for a greater range of positions than drivers without such endorsements current.

Conversely, a set of factors that restrict a driver's options for alternative employment include:

- *Rural /small town location* - these feature a limited number of business offering few opportunities for alternative employment;

- *Licences /endorsements expired* – drivers that have no endorsements current are only suitable for a more narrow range of positions than drivers with such endorsements;

- A *blemished driving record* (whether due to a road accident or a fine for illegal driving) inevitably casts a driver as a potential re-offender, which usually restricts the opportunities for getting another driving job, as some operators are wary of employing drivers with a blemished record; and

- *Financial support arrangements* made available by the operator to the driver and his/her family usually tie the driver firmly to the operator for the duration of his/her driving career, with no option for alternative employment – a practice known as "the golden handcuff" for that very reason.

7.3.4 Recruitment and Retention

Shortage of labour

"Not enough drivers as not enough labour. This is among other things due to dairy conversions, which require more labour per farm, so there has been a need to import people from other areas and outside NZ."

Reasons to stay

"Loyalty", "they look after you", "the money." "No choice, no other jobs in town."

Reasons to quit

"Offered more money", "stock and paperwork", "dairy – quit due to monotony", "new driver quit as truck too big", "ill health", "sick of it", "secrecy in office", "too many bosses in company", "undue stress from traffic / accident risk", "too much pressure", "caught in the middle."

Not enough hours

"Not enough income from only doing limited hours in a week" (in this case - on night shift), "so quit due to not enough hours". "Not enough income to pay living expenses – can't live like that". "Some truck drivers quit driving and go and work in the forest instead, as there are 40 hours work a week guaranteed".

Pay and conditions

"Didn't realise how awful it was going to be - shit conditions, shit pay". New job as a loader driver means "sitting on the hillside bunching wood –no hassles, no cops". This driver had come in as a digger driver, but was put on trucks, had been driving for half a year. "Had a call for driving a digger - $800 in the hand, working 7 to 3:30 plus overtime, and use of a company car".

The long hours

One driver who was "thinking of going to other work" had told the owner that he had had enough of the long hours.

Vicious circle

The industry is now "so hard up for drivers that they put cowboys (i.e. not experienced and "true professional" drivers) on the road, which makes the roads more dangerous, which is another reason to quit".

Fear of having an accident

One driver told of quitting driving and going to Australia to work (but couldn't get a job there). His reason for quitting the driving job was fear of having an accident – the driver was getting complacent said his partner.

Overuse of remaining staff

A driver told of a past job, driving for a different company, the driver was due three weeks holiday, asked for the holiday, but was told he couldn't take it as there was no replacement driver. It took that driver three months to get a week's holiday. By then the driver was burnt out - had flu and took three days off, then gave notice, worked the notice out, was offered a new truck if staying with the job, had no job to go to, but still quit.

7.3.5 Management practices

A broad range of management practices were encountered, from old-fashioned, top-down, autocratic, paternalistic or abusive, to contemporary practices such as allowing drivers to sequence their own working day, performance bonus systems, and having regular staff meetings to clear up any workplace issues. Most drivers reported a good relationship with their employer – "if something is wrong, just talk to him". Drivers said, "if you do your job right, they leave you alone, let you get on with it". Exceptions included a manager lacking people skills, drivers getting no thanks, alleged favouritism, and a bonus system left in limbo.

"Looking after" drivers

Drivers talked with approval of employers who "looked after" them well – providing free clothes, boots, safety vest, and hard hat. Drivers said that a company is good to work for when "if you need something, you just need to ask for it – for example borrowing money when hard up".

Driver 'say' in their day

Drivers being allowed to share responsibility and propose options, and manage their own day. Management had asked drivers: "where should we go next?" Important to let the drivers choose their own routes for the day – leads to better job satisfaction. "They have pride in their truck, but also need pride in their day." "We have the 'bottom end' working for us, they are getting better, more productive, when they perceive they have input in what they do in a day."

7.3.6 Workplace issues

While drivers spoke of a range of issues, the common denominator was people: most driver issues were people issues, frequently over drivers perceiving that other people put them at risk through the manner in which they performed their work.

Dispatcher issues

"The dispatcher ruins the day for a driver: dispatch a driver to wrong places, give a driver a 6 o'clock start." A dispatcher was said to be able to bankrupt an owner-driver in days. If the dispatcher makes a mistake, and a driver takes one load too many, he may well have to take it back. "Trouble with logistics, when sometimes you arrive to pick up a load and the loading gear is not there. Then the whole day is thrown out of kilter."

Speed limit issues

Speed limit of 80km/h for truck-trailer combinations was said to be too slow. "Truck drivers used to get away with 100K – now 86K tops." "It is a pain for other drivers too, who will feel frustrated behind a log truck, and will try to overtake." Several drivers said there should be areas of highway with 90K for trucks with a trailer (so you could do 95K): the Auckland motorway from Bombay to Silverdale, and the stretch of road from the Brynderwynns to Whangarei. Cf. B-trains are allowed to do 90K.

Paperwork issues

Drivers frequently have trouble over paperwork. "Paperwork will have to be perfect when you get pulled over." The required paperwork could include:

1. twenty metre permit;
2. 44 tonne permit;
3. road user charges; and
4. logbook.

In addition, there are the following to keep track of:

5. running sheet; and
6. delivery dockets (in triplicate).

Some truck drivers said the paperwork is simple, no problem. Other drivers don't like dealing with the paperwork. "If you lose one docket, all hell breaks loose, as each docket is like a blank cheque - without a docket the delivery does not get paid for, and the owner doesn't get paid. If a driver loses any of the paperwork on the road he's in trouble."

7.3.7 Pressure on drivers

Drivers frequently spoke of stress from a range of sources - pressure from other drivers, from CVIU, from the hours of work, from the weather (if it rains it makes stopping more difficult), from the condition of roads (roads not up to scratch for trucks today - surface and camber worn out).

Hours of work.

Drivers talked much about stress from the long hours of work, which leave them short on sleep and impacts on their social life, and about having to stay away from home sometimes for days on end, with little opportunity to plan ahead. This put stress on marriages and family relationships. Several drivers

commented on this, and how many of them were now into their second marriages, as their first marriages had succumbed to the stress.

Fear of accident.

Drivers indicated stress arising from fear of being involved in a road accident due to the dangerous driving behaviour of car drivers on the highway, especially dangerous overtaking of long truck-and-trailer combinations. Truck drivers told multiple stories of near misses, including putting themselves at risk by pulling the truck over on to the verge to save an overtaking car from a head-on collision with an oncoming vehicle – sometimes initially only visible to the truck driver from his / her elevated position in the truck cab, while not yet seen by the driver of the overtaking car. "Not a day goes by without a close shave."

Compliance pressures

Drivers also spoke of stress from law enforcement personnel, arising from fear of being caught inadvertently in breach of some regulation, despite all efforts to comply. This is complicated by the fact that some infringements that can lead to a truck driver being fined are outside the driver's direct control. Drivers told of situations where they found themselves knowingly driving their truck in breach of some regulation due to *somebody else* not doing their job properly, but in the circumstances not able to refuse to drive without a major disruption in normal work processes, and possibly risk getting fired in response.

7.3.8 Industry image

There was general agreement that the image of the industry was bad. Drivers said other people saw them as being at the bottom in terms of employment status, and claimed they were frequently treated with lack of respect by customers, bosses, enforcement officers and general public – being "everybody's bastard". This contrasted interestingly with a few young drivers who described themselves as "qualified professional drivers", conveying a positive image of themselves and their skills.

It was suggested that public bodies are not pushing the transport industry enough. There is a premium on the "knowledge economy" – very different image from truck driving. The industry is relegated to people "who can't do anything else". Seen to "end up with" people rather than result of active pursuit of truck driving as a profession.

The bad image of trucks was blamed on the media, especially the press. Said to blow up in big headlines any traffic incident involving a truck, regardless of whether or not the truck driver was at fault.

7.3.9 Career path and progression within the industry

Truck drivers were said to join the industry because they are bred into it. An interest in machinery that comes from parents or growing up on a farm, driving tractors and trucks. "You just about learn to drive before you could walk." Many truck drivers interviewed were ex-farmers and farmers' sons, people whose dad had a truck. "People who are yearning to work outdoors."

In the past, a driver's career started with sweeping the yard, then led to driving the town van, then six-wheelers, then to get a chance on a B train. So the skills were learned gradually. Nowadays this infrastructure for on-the-job career paths no longer exist. In today's big company the town vans are driven by owner-drivers, no opportunity to "graduate", to drive them from within the company. Intermediate level driving can be found driving stock trucks and metal trucks. In logging there are no small trucks, all 44 tonne.

Drivers start with all kinds of driving, at the bottom, to work their way up. Once drivers get on the big trucks, they don't want to go back. Bigger companies, move from town van to driving a B-train. "That's how most of us started. What else can a truck driver do? Farming and truck driving. Be your own boss all day".

Drivers said "when recruiting a dispatcher, get a driver". Most trucking companies were said to use ex-drivers for staff. But a dispatcher does need good reading / writing skills. One driver told how he wanted to swap to despatch, but the owner would not let him off driving. Another mentioned a driver who had started work as a dispatcher with twenty-five "mates", but had only five remaining when he left the job. This was because he was not able to please everybody and was seen to be favouring his "mates" by giving them "the cream" – i.e. the best work.

Typical paths of progression within the industry identified in the analysis include:

- Progression from trucking or farming background, familiar with machinery, to truck driver licence training;
- progression from new driver (small trucks) to class five;
- progression from trainee to team leader – progression among drivers within the company;

- progression between jobs / sectors, frequently in search of improved pay or conditions, e.g. from line haul to top paying jobs like log trucks ("pays better than average") and dairy tankers ("top dollar");

- going overseas to work for a season in Australia or the US;

- progression from truck to office (where staff is commonly recruited from among long time drivers): dispatch, HR, line manager, internal trainer or assessor (to unit standards);

- progression from waged driver to owner driver; and

- progression from owner driver with multiple trucks to transport operator.

Log truck drivers are required to be more highly trained and experienced than drivers in most of the other sectors. They have to work in more dangerous conditions including on unsealed off-highway roads, and near harvesting equipment. It is difficult to learn the off-highway driving skills other than through working with the existing experienced drivers. Generally once drivers learn the special skills that are required in the logging sector, they tend to stay with this type of work.

Figure 4 illustrates the progression of drivers through their career. It is representative only. Progression and level of skill varies markedly from one position to the next depending on a range of differing circumstances.

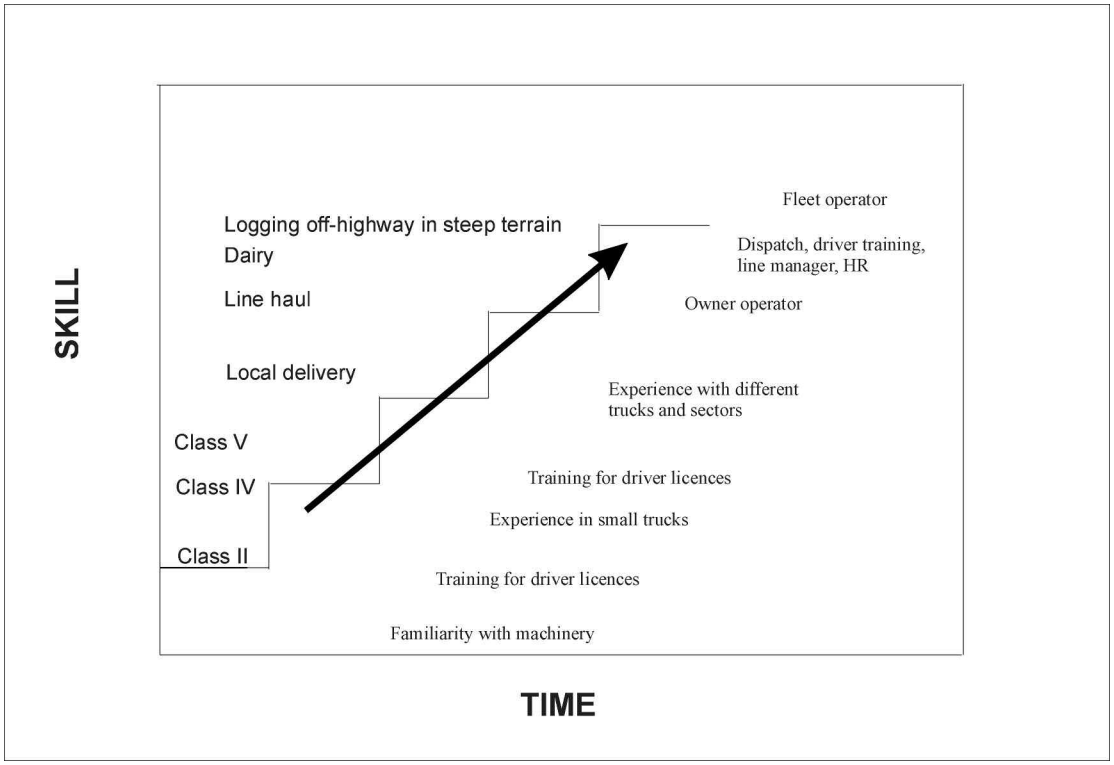


Figure 4 Progression within the industry (Illustrative only)

7.3.10 Pay rates

Drivers generally considered pay rates to be low, and not enough pay for the responsibility and conditions. Pay systems ranged from flat rate to unionised negotiations-with base and penal rates, overtime etc; medical and superannuation schemes are only encountered in some industries such as dairy, or with some operators. A frequent driver comment on the shortage was that employers don't pay drivers enough – "if they would pay enough money there is no doubt the employers would get the people, and also attract more young ones". They stressed that "the dairy company has no trouble finding drivers for their tankers – they have waiting lists, as it is a clean job, and good pay, even with the shift work".

Drivers said they wanted "enough for a decent life", "dollars is the issue", "professional pay". Some suggested that a top driver is really a tradesman - licences required, trailer licence; requires a lot of knowledge, "we need to be mechanics".

7.3.11 Poor rewards

Low rate of pay

The rate of pay was generally considered comparatively low. This was said to be "because the haulage rates are low and don't allow appropriate remuneration for the skilled drivers. If transport companies don't make a profit, there would be no jobs, so drivers accept it."

Drivers on wages generally do the maximum possible number of hours. "The hourly rate in the logging sector is approximately $13 to $15 but drivers can do lots of overtime, which can add up to $50,000 a year (if they work a 70 hour week) or $900 – $1000 per week after tax. Many operators won't hire "10 dollar drivers" who do not have enough skills.

"Green" trainees earn approximately 50% of a full wage: " $650-700 per week after tax". A sample young recruit started (from being on income support) with a pay rate of $8:50 an hour "and expects to stay like that until he becomes more experienced."

Driver pay has not risen with the cost of living

Pay was said to be the same as 15 years ago – it has not kept up with inflation. Comparison with a carpenter: " in the past a driver got 7 shillings an hour and a carpenter got 7 shillings and sixpence. Now a driver gets $14-16 per hour, while a carpenter gets $25–30 per hour."

Pay and contract rates depend on forest owners

Some forest owners are at present unable to get their logs transported at their desired rate, due to a shortage of drivers. Forest owners need to make allowance for pay and contract rates to be increased. There are now 1100 log trucks in the country, but this number is set to multiply by three. There are two to three new trucks put on the road in New Zealand per month.

7.3.12 Health and safety

Health issues raised included lack of sleep, back trouble, and ageing drivers who need to be assigned to less arduous work. The driver shortage has safety implications, as truck owners can't afford the truck being idle, regardless of the quality of the driver. This evokes a scenario where an increasing shortage of drivers will lead to an increasing proportion of poorly skilled drivers on the highways, possibly resulting in an increased incidence of heavy truck accidents.

7.3.13 Consistency of work

Some drivers spoke of their work being seasonal, following production cycles in the farming and construction industries – dairy tankers, stock trucks, rural contracting and construction have a quiet season over winter. Seasonal work

meant earning less in the winter, while working only 40 hours per week was considered "not enough for a decent life".

7.3.14 Hours of work

Most drivers on an hourly wage spoke of working 14 hours a day Monday to Friday, a total of 70 hours a week – the legal maximum, without going outside 'logbook hours'. There was general agreement among drivers that this left little time for social life – "a toll on partners, hard to have a life, can't plan anything".

Operators spoke of basing drivers pay directly on their drivers' logbook entries, thereby making sure that there was no incentive for drivers to work illegal hours –" no driver could claim more than seventy hours a week in pay".

7.3.15 Working conditions

Line haul often means staying away from home, also repetitive work. "Work is not fun anymore", "there are new rules every week." "Customers treating drivers badly", "high pressure job", "lots of stress", , "no mistakes." "Long hours", "dispatch pushes the boundaries". Industry down-sizes, adding more tasks to drivers work. "A lifestyle job, if you like to meet people."

Working conditions were found to vary between sectors within the transport industry since different loads (e.g. stock, logs or milk) place different demand and restrictions on vehicles, trips and drivers. The three case studies in Appendices C, D & E illustrate this variation. The case studies are on log truck drivers, stock truck drivers, and dairy tanker drivers respectively.

7.3.16 Enforcement issues

The industry was said to be "over-regulated", featuring a "constant stream of new laws and regulations, or changes in legislation". Rules and regulations were said to have become "tougher, more numerous and place a lot more onus on drivers". "You can get pinged for so many different things". This puts some drivers off, as they are personally liable for both load securing and their logbook.

Sample issues arising from regulations:

- Speed limit 80K for truck and trailer leads to cars overtaking, passing lanes issues. "People don't know - educate the public / other drivers".

- Log books were said to cause accidents, "due to pressure to drive full logbook hours (14 hours per day), and to drivers speeding to get to their destination before they run out of hours".

- CVIU / Highway Patrol 'targeting'

- Culpability VS responsibility (see discussion under Section 7.4.16 Compliance pressures)

Fines were generally considered "too hefty for the offence, especially compared with fines for 'criminals'". One driver told of how he "trusted the paperwork", didn't use the weigh bridge, and "got caught with 60-plus tonnes" (VS. 40-plus on paper). One box was overweight - five times heavier than it said on the papers- plus no DG's on the paperwork. That driver was fined $36,000; he paid it off slowly through the 'drip feed' system (+ paid $5,000 lawyer's fees).

When enforcement moved from MoT to Police / CVIU "things changed for the worse". Drivers said the Police "enforce the law to the letter – but sometimes don't know what they are doing".

Log book issues

Uncertainty: a driver may get to the port, find twenty trucks in the queue, and have to wait for an hour, still on duty time. In response to this uncertainty, some drivers were said to "start the logbook late, but keep it open and ready to fill in if stopped". It was said that this was done to "make sure you have enough time left to get home". Drivers said: "do away with log books, they only makes liars out of people". "It is easy to check up on drivers nowadays anyway, you leave a record when you use the weigh bridge, you use your card when you fill up the tank".

7.3.17 Compliance pressures

Compliance pressures and the pressure associated with driving in breach of regulations were issues much discussed in driver interviews, and were seen principally as generators of stress for drivers.

Drivers repeatedly raised the issue that *they* were targeted with fines for most breaches, while the factors that led to breaches were frequently outside their direct control. This lack of driver control over many of the factors that lead to breaches was seen as a major contributor to driver risk, stress and dissatisfaction and so to workforce attrition.

Many of the factors leading to breaches of regulations that resulted in driver fines were said by drivers to be traceable to a range of players other than the drivers themselves. These other players, both inside and outside the company they work for, are people who are part of the larger transportation system within which truck drivers work:

- Office staff;

- Dispatch;
- Workshop staff;
- Loader / fork lift operator;
- Other drivers / traffic;
- Institutions: OSH, LTSA, TRANSIT, CVIU; and
- Clients.

Driver 'control' over most of the factors that lead to breaches was said to be "only through controlling those people / relationships". Hence the finding that most driver issues were people issues. Many driver issues involving other people can be read as disagreement over responsibility for factors that might result in breaches "for which the driver then becomes liable, if caught".

7.3.17.1 Compliance issues as seen from a driver perspective

A detailed analysis was conducted of issues concerning regulations and enforcement, as seen from a truck driver's perspective. The resulting table lists classes of regulations; potential breaches; the nature of the offence; who is culpable and responsible for the breaches; and the drivers' views on who pays the fine for infringements or receives another sort of penalty:

	Regulation	***Representation***	***Breach***	***Offence***	***Culpability and Responsibility***	***Fined/penalised***
Vehicle	truck /trailer licence	licence plates	vehicle unlicenced	**driving** that vehicle	operator /office	driver
	current registration	stickers /papers	registration expired	**driving** that vehicle	operator /office	driver
	permits [20m / 44t]	permit papers	no current permit	**driving** that vehicle	operator /office	driver
	vehicle fitness	current CoF	no current CoF	**driving** that vehicle	operator /workshop	driver
	brakes working	current CoF	break malfunction	**driving** that vehicle	operator /workshop	driver
	lights working	current CoF	light failure	**driving** that vehicle	operator /workshop	driver
	tyres not bald	current CoF	tyre below standard	**driving** that vehicle	operator /workshop	driver
Load	goods type	bill of lading, labels	d.g.s in load, stock unwell	**driving** that load	dispatch /client	driver
	weight limits	bill of lading, scales	overweight	**driving** that load	loader /dispatch /client	driver
	height limits	[visual inspection]	Overheight	**driving** that load	loader	driver
	length /protruding	[visual inspection]	too long /protrudes too far	**driving** that load	loader	driver
	load securing rules	[visual inspection]	not secured to rule	**driving** that load	driver	driver
Trip	distance charges	RUCs	insufficient RUCs for trip	**driving** without RUCs	operator /office	driver
	80k speed limits	speedo, radar	vehicle speed over limit	**driving** too fast	driver /dispatch /cars	driver
	speed limits	signs, radar	vehicle speed over limit	**driving** too fast	driver /dispatch	driver
	road code	booklet	traffic offences	**driving** in an illegal way	driver	driver
Driver	truck driving licence	drivers licence	no licence for veh. type	no licence **driving**	driver /operator	driver
	d.g. endorsements	on drivers licence	no licence for d.g.s	no licence **driving**	driver /dispatch /client	driver
	forklift endorsement	on drivers licence	no licence forklift use	no licence **driving**	driver /dispatch /client	driver
	limit on hours driving	log book entries	outside legal hours	**driving** illegal hours	driver /dispatch	driver
	limit on hours driving	log book entries	false logbook record	logbook offence	driver	driver
	blood alcohol limit	breath /blood test	drinking on the job	drunk **driving**	driver	driver

Key:	
	driver responsible for breach
	others responsible for breach
	driver and /or others responsible for breach

Table 4 - Drivers perspective on culpability and responsibility for traffic infringements, and who they consider receive the penalties

Points to note about the chart:

- The table reflects the comments that were received and is consequently primarily a driver's view.
- The bold text featuring the word 'driving' in the *Offence* column highlights the fact that drivers are fined, as one driver put it, "for doing our job – driving".
- The difference between the *Breach* and *Offence* columns shows how the breach-inducing activities or responsibilities of persons other than the driver, place the driver at the risk of committing offences and thereby receiving fines and / or other punishments.
- It is designed to highlight the point made by drivers that in all cases of breaches that lead to offences, it is the driver who is fined (and / or has his / her licence suspended), while in the view of drivers, in many cases the breach that led to the offence was largely beyond the driver's control.

Drivers who find themselves knowingly driving in breach of regulations are working in a situation of increased risk of enforcement action, resulting in increased driver stress linked to the anxiety of being found in breach of the regulations.

7.3.17.2 Differences in perspectives between drivers and operators on culpability

The view of the wider truck transport industry (as represented by the Project Steering Committee) is that the detailed analysis shown in Table 4 is biased towards the perception of drivers and does not reflect what actually happens in practice. It was pointed out that for many of the breaches; operators rather than the drivers are prosecuted. This includes breaches related to the condition of the vehicle and its registration, mass and Road User Charges as shown in table 5. It is the drivers' perception, right or wrong, that is important in this investigation as the issue of concern is driver recruitment and retention. The difference in perception needs to be addressed as part of any initiatives aimed at overcoming the driver shortage.

	Regulation	Representation	Breach	Offence	Primary Culpability/ fined	Secondary Culpability/fined
Vehicle	truck /trailer licence	licence plates	vehicle unlicensed	**driving** that vehicle	Operator	Driver
	current registration	stickers /papers	registration expired	**driving** that vehicle	Operator	Driver
	permits [20m / 44t]	permit papers	no current permit	**driving** that vehicle	Operator	Driver
	vehicle fitness	current CoF	no current CoF	**driving** that vehicle	Operator	Driver
	brakes working	current CoF	break malfunction	**driving** that vehicle	Operator	Driver
	lights working	current CoF	light failure	**driving** that vehicle	Operator	Driver
	tyres not bald	current CoF	tyre below standard	**driving** that vehicle	Operator	Driver
Load	goods type	bill of lading, labels	D.G.s in load, stock unwell	**driving** that load	Operator/dispatch	Driver
	weight limits	bill of lading, scales	overweight	**driving** that load	Operator/dispatch	Driver
	height limits	[visual inspection]	Overheight	**driving** that load	Driver	Operator
	length /protruding	[visual inspection]	too long /protrudes too far	**driving** that load	Driver	Operator
	load securing rules	[visual inspection]	not secured to rule	**driving** that load	Driver	Operator
Trip	distance charges	RUCs	insufficient RUCs for trip	**driving** without RUCs	Operator	Driver
	80k speed limits	speedometer, radar	vehicle speed over limit	**driving** too fast	Driver	
	speed limits	signs, radar	vehicle speed over limit	**driving** too fast	Driver	
	road code	booklet	traffic offences	**driving** in an illegal way	Driver	
Driver	truck driving licence	drivers licence	no licence for veh. type	no licence **driving**	Driver	Operator
	D.G. endorsements	on drivers licence	no licence for D.G.s	no licence **driving**	Driver	Operator
	forklift endorsement	on drivers licence	no licence forklift use	no licence **driving**	Driver	Operator
	limit on hours driving	log book entries	outside legal hours	**driving** illegal hours	Driver	Operator/dispatch
	limit on hours driving	log book entries	false logbook record	logbook offence	Driver	Operator/dispatch
	blood alcohol limit	breath /blood test	drinking on the job	drunk **driving**	Driver	

Table 5 – The wider industry view on culpability and responsibility for traffic infringements and who in practice receives the penalties

7.3.18 Gender issues

The survey encountered few women drivers of heavy trucks. There was general praise for the few there are.

7.3.19 Licence /licence endorsement cost & time requirements

From about five years ago, since the introduction of the photo licence, there has been a new system of driver licensing. There are now five licence classes:

1. Class 1L, 1R and 1 light motor vehicle
2. Class 2L and 2 medium rigid vehicle
3. Class 3L and 3 medium combination vehicle
4. Class 4L and 4 heavy rigid vehicle
5. Class 5L and 5 heavy combination vehicle

After Class 1 (the standard car licence) each new class requires that the previous class be held for at least six months before a learner licence for the new class can be obtained. At each stage, this learner licence also has to be held for six months,

unless the licence applicant passes a training course offered by an approved training provider.

This 'graduated' licensing system was uniformly felt to be too slow and expensive, and a deterrent for potential new recruits. The six month 'stand-down' periods with the inability to work at the higher truck size received much criticism, and was, with overwhelming consistency, the first response of interviewees to open questions seeking explanations for the current shortage of heavy truck drivers.

Most experienced drivers interviewed in the survey obtained their 'trailer licence' under the old system, which was quick and posed no barriers in terms of the time it took – "it was a walk-in test, if you passed, that was it, you got your licence". This stands in stark contrast to today's system, with five tiers of licence classes separated by obligatory stand-down periods - "it can take more than two years[5] from when you begin".

It was said that "the new licensing laws have made it *cost too much* and *take too long* - young aspiring drivers don't have the money". Cost was said to put a lot of people off, the fees were said to be too high "also for regular licence endorsements". There were some examples of the transport companies who help with course fees to reduce time and cost to the driver for him/her to get their license. The written part of the licence test was said to "put off new recruits". "Too many licence classes". There was a suggestion that "proliferation of licences is driven by an aim to raise revenue".

The system was perceived by drivers "as being too onerous, and constituting a serious barrier for young people who want to become heavy truck drivers".

Time

It takes time, and for part of that time during the six month periods when the learner driver is not yet fully qualified for a licence class, it is difficult for him or her to obtain paid work. "It is hard to find an employer who will pay to have a learner driver travel with an experienced driver while learning, as the learner driver is an extra cost, not essential to get the job done".

Cost

If a driver tries to shortcut each six-month period with a learner licence by taking a course, this will allegedly "cost the driver between $1,000 and $1,500, which acts as a barrier to young people just out of school".

[5] Some drivers said three years, comparing it to the time it would take to get a B.A. at university.

No access to finance

Drivers claimed that "it was not possible to obtain a student loan to pay for driver training and banks would not lend to someone who did not already have a job".

7.3.20 Initial training opportunities

It was considered that there were very few opportunities, as "you can't get a job without experience and you can't get experience without a job" while existing opportunities are diminishing with new rules that constrict informal off-siding by people keen to learn the job.

The survey encountered drivers who told of attending Polytech courses to obtain their class two licence, or Dangerous Goods endorsements. Comments on this included: "Inexperienced Polytech boys - there is nothing for them to do". It was repeatedly stressed that attending a Polytech course would not guarantee a driver a job. There were also examples of aspiring drivers with 'Polytech' 'work experience' who spent time working in a commercial trucking operation that lead directly to a job, subsequent to their completing the course.

Drivers told of how they attended courses for Dangerous Goods and forklift endorsements. A common model was that the company pays for training, while the drivers themselves pay for the endorsements to go on their licence. "Getting a job depends on having all the right licences", "if you don't have a trailer licence, you're no use to us". There was said to be a need for apprenticeship and other training schemes.

There was much complaint about a "previous government that closed down the apprenticeship schemes". This was seen as a major contributing factor behind the current driver shortage. Most operators interviewed saw a need to revive these apprenticeships and some steps were being taken in that direction by a small number of larger operators around the country, through the "Modern Apprentices" scheme.

7.3.21 Industry provision of training opportunities

A few larger operators kept a small truck in their fleet to provide an in-house pathway for new drivers to get experience and move up to a higher class of licence, with the goal of growing the pool of class five drivers within the company. Some operators complained that in-house training had led to pay rise demands after drivers completed courses, or else drivers found new jobs on the basis of their newly obtained qualification.

"In the past there was a course for logging, they had their own skids to practice on etc. Nowadays trainers place trainees with existing companies, but this leads to a *production focus* rather than a *training focus"*.

"One solution would be to provide proper training for people, by making it possible to run a highway truck off highway. Such a training operation could include one truck off highway and a few on highway to train people. Drivers could be certified after e.g. 1000 hours behind the wheel. Somebody would have to own the truck – *no operator will let one of their trucks be driven by a novice"*. It was also suggested that this was likely to be expensive training, therefore in need of some form of subsidy. It was suggested that training could be subsidised by the rates paid for log cartage – e.g. 50% production level at 50% rates.

NZQA unpopular among drivers

The NZQA qualification process was not highly regarded by drivers. They derided the suggestion that "now you can get a licence through correspondence". Drivers told of having to 'go to school' every Saturday morning, but questioned the qualifications and competence of their trainers. Driver gave examples of logbook training – "the course example was all wrong and illegally filled in" said the driver. Another example was a tarpaulin course. The course was delivered by "somebody who didn't know the work, e.g. which loads need to be kept dry". The course was said "to be a sham, they had a four tonne truck and a 40-foot tarpaulin (mismatched), and didn't even manage to tarp' one load during the course, but everybody passed the course nevertheless". The consequence was seen as "people 'getting tickets' which misrepresent their skills".

7.3.22 Ideas on attracting suitable recruits

Promotion in schools, and improving the image of truck drivers and the transport industry as a career.

It was agreed that people without a 'strong work ethic' do not make suitable recruits, as the demands of the job require a fairly high level of self-discipline. Several operators claimed that their attempts to recruit from drivers on the WINZ register had been "a waste of time" and long-term unemployment was seen to be "destructive to the unemployed person's work ethic".

8 SYSTEMS THAT AFFECT RECRUITMENT AND RETENTION

Stakeholder issues were analysed to arrive at strategies for their solution. Firstly by constructing a 'problem-tree' of issues arranged into cause-effect chains around a 'core' issue, to which all others are linked either as causes or effects. Secondly by re-framing all the *linked issu*es in the problem-tree as 'negative states', and using these to derive a corresponding set of *linked objectives*, each aimed at changing a particular negative state identified into a positive state. In this way the analysis moved in a structured and systematic manner from the set of issues identified in the survey research to a vision and a set of strategic objectives designed to begin to address those issues.

8.1 Core problems from the perspective of truck drivers

The analysis was developed from the perspective of truck drivers as key stakeholders within the system. Two separate analyses were carried out reflecting the dual study concerns of driver *recruitment* and driver *retention*. 'Core problems' for analysis were defined in relation to each of two key types of driver, facing specific issues as seen from their own respective points of view, i.e.:

- *New or aspiring truck drivers*, facing barriers when seeking to enter the industry – barriers which may ultimately *motivate them to look for another career*, a fundamental description of factors governing *recruitment* of heavy truck drivers; and

- *Experienced heavy truck drivers*, facing a range of issues that *motivate them to look for another job* – a fundamental description of factors governing *retention* of heavy truck drivers.

8.2 Aspiring drivers

The research focus on 'issues and problems that affect recruitment of new drivers' was re-framed within an 'aspiring driver'-centred perspective as 'factors that lead an aspiring driver to choose another career path'. Factors identified as motivating new or aspiring drivers to give up their goal of driving and go to other careers were organised into a 'problem tree' of *linked causes and effects*. In this manner the research identified a set of interrelated barriers that contribute to aspiring drivers abandoning the 'becoming a truck driver' aim and seeking other careers.

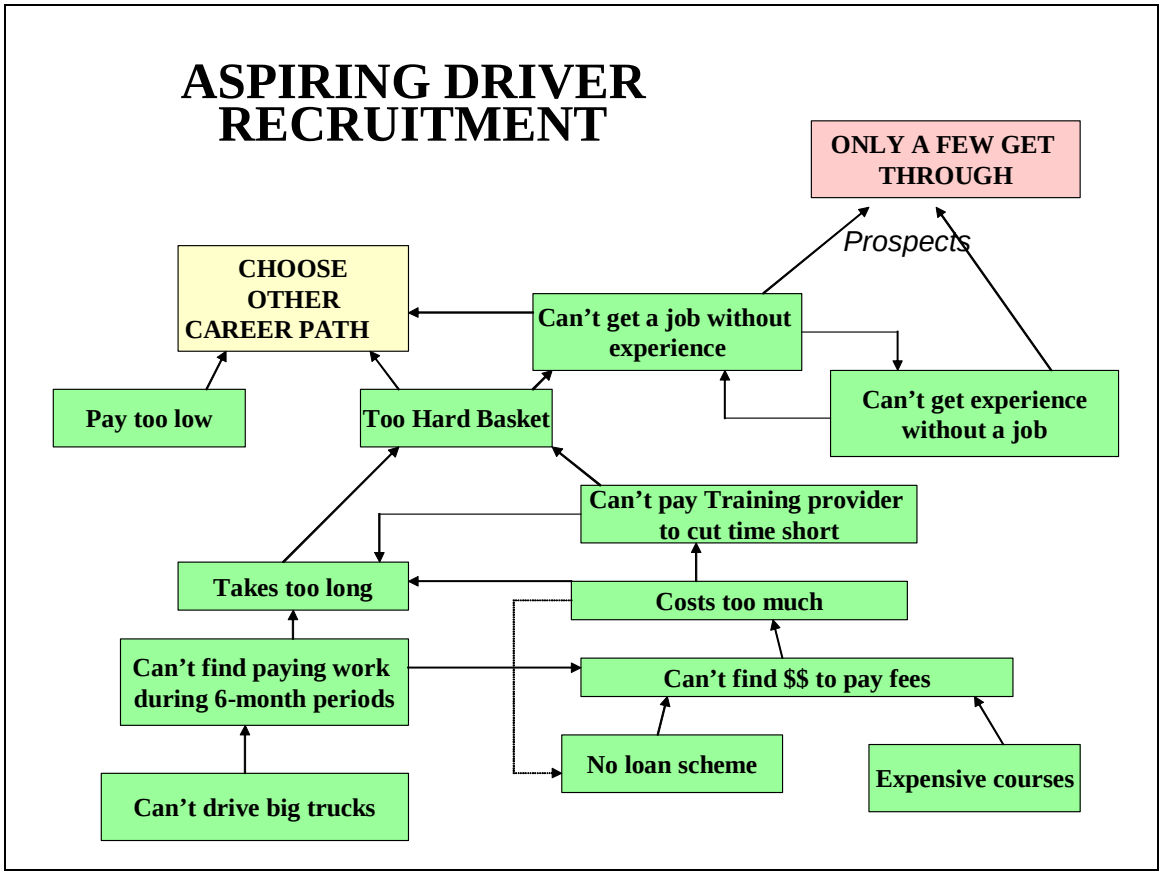


Figure 5 – Problem tree showing interrelated barriers that contribute to aspiring drivers abandoning the 'becoming a truck driver' aim and seeking other careers.

Takes too long –can't drive big trucks until later; so can't find paying work during 6-month periods, can't afford to pay a training provider for a course to cut the time short.

Costs too much - course and licence / endorsement fees seen as expensive, "can't find $$ to pay", no student loan scheme available for driver training.

Experience 'Catch 22' - a vicious circle can lock new licence holders out of the industry for up to several years as they can't get a job without experience and can't get experience without a job.

The combination of these barriers, coupled with the fact that the pay rates are relatively low compared to other career options means that only some of these aspiring truck drivers get through and become professional drivers, while others put their aspirations in the 'too hard' basket and choose other career paths.

8.3 Experienced drivers

The research focus on 'issues and problems that affect retention of experienced drivers' was re-framed within a driver-centred perspective as 'factors that lead an experienced driver to look for another job'. Issues identified in the analysis as motivating experienced drivers to quit and go to other jobs were organised into separate problem trees.

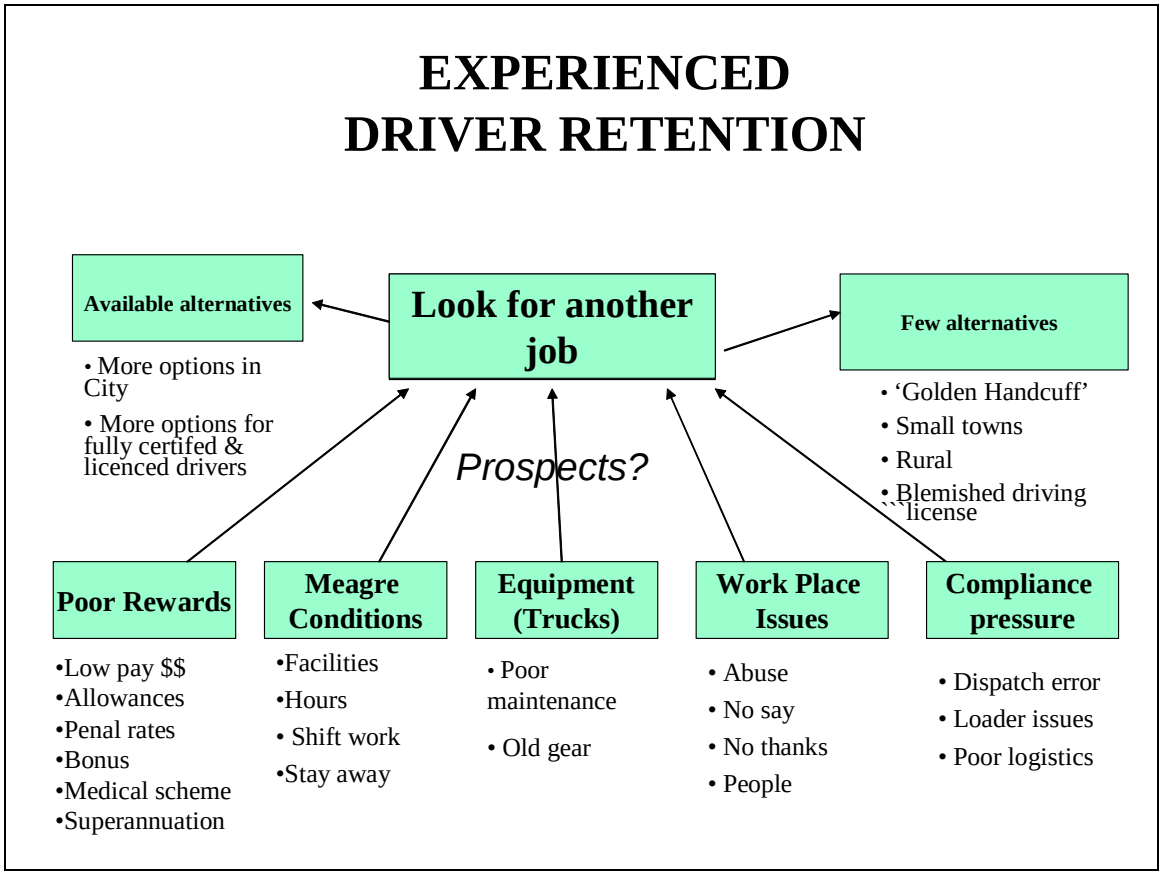


Figure 6 – Problem tree showing issues identified in the analysis as motivating experienced drivers to quit and go to other jobs

Poor rewards –low pay, lack of allowances, poor penal rates, no bonuses, no medical / superannuation schemes.

Meagre conditions –poor facilities, long work hours, shift work, staying away from home. For a fuller description refer to Appendix D, E & F - logs, stock & dairy drivers.

Equipment (Trucks) – "poor maintenance, old gear".

Work place issues –no say, no thanks, verbal abuse.

Compliance pressures –frequently a result of dispatch error, difficulties with loader drivers, or poor logistics.

Compliance pressures were analysed from a driver perspective according to whether potential offences were breaches of regulations concerned with the *vehicle*, *load*, *driver* or *trip*:

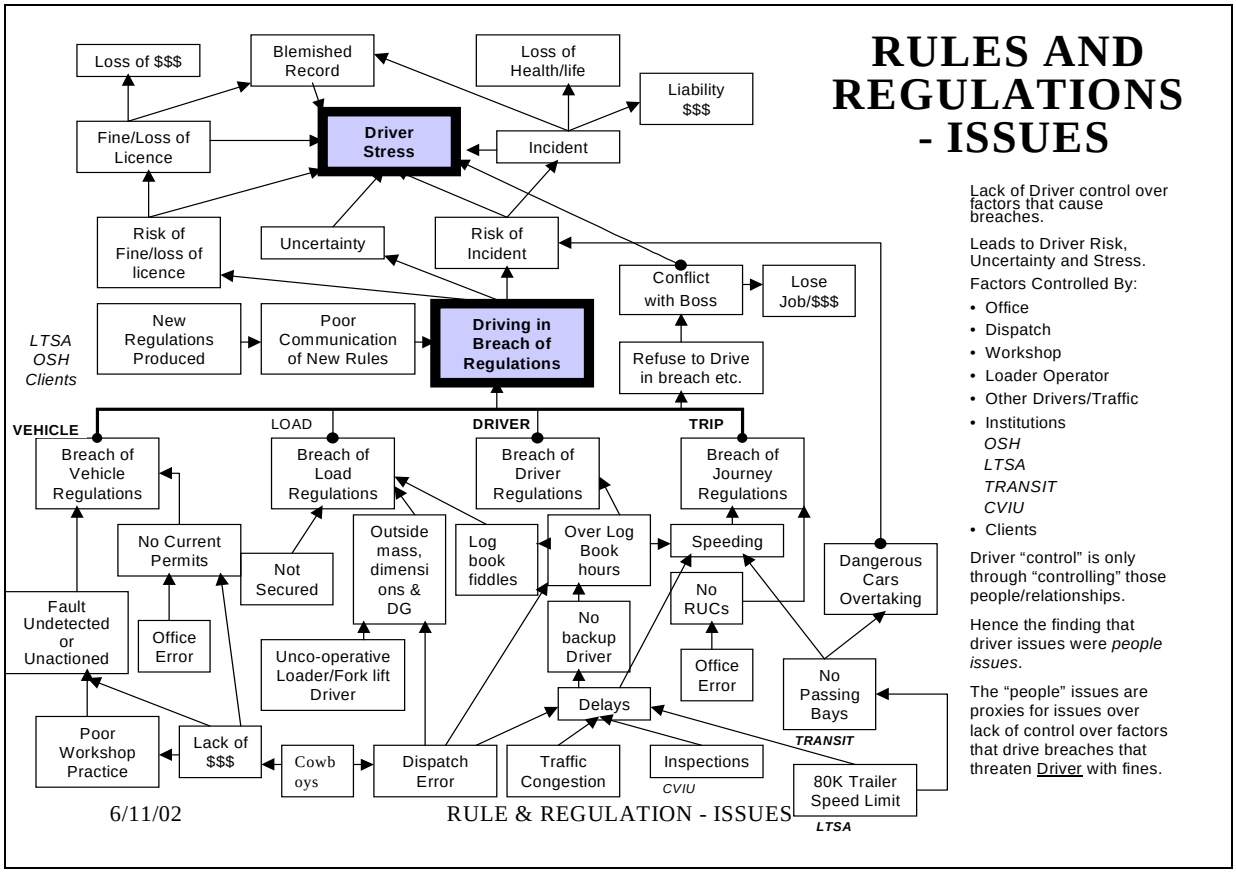


Figure 7 – Problem tree showing compliance pressures analysed from a driver perspective according to whether potential offences were breaches of regulations concerned with the vehicle, load, driver or trip

Breach of vehicle regulations –due to a fault not being detected or not being actioned, poor workshop practice, or a lack of current permits, with causal links to office error, lack of $$$ and the practice of using so-called 'short-term cowboys' were mentioned as underlying factors.

Breach of load regulations – improper loading of dangerous goods, load not properly secured or outside mass and dimensions limits, with links to uncooperative loader / fork-lift drivers, or office / dispatch 'error' seen as underlying generators.

Breach of driver regulations – "log book fiddles"; with links to delays, driving over log book hours, lack of relief driver backup, dispatch error, traffic congestion, and roadside inspections.

Breach of trip regulations – lack of RUCs or speeding, linked to office error, 80K trailer speed limit, risky overtaking by cars, and lack of passing bays seen as underlying causes.

Breach of new regulations – linked to poor communication of new rules to those who can act on them.

Refusing to drive in breach of regulations – risk of conflict with manager, and risk of losing job and income.

Drivers who knowingly drive in breach of regulations are working in a situation of an increased risk of a bad outcome. The lack of certainty about such potential bad outcomes puts stress on drivers – they face the threat of fines, losing their licence and income or having an accident that incurs loss of health or life, medical or liability costs and leaves a permanent blemish on their driving record that compromises their eligibility for top jobs in the future.

9 WHAT THE INDUSTRY WOULD NEED TO LOOK LIKE TO IMPROVE RECRUITMENT AND RETENTION

The problem analyses were used to generate 'objectives trees' of linked positive states, each expressing a *positive vision* of the industry, free of the issues that now motivate experienced drivers to seek other jobs, and free of the barriers that now lead new / aspiring drivers to seek other careers.

9.1 A vision for improved recruitment

The research focus on 'addressing the issues and problems that affect recruitment' was re-framed within a driver-centred perspective as 'industry entry easy'. The 'barriers to industry entry' are re-cast here as components of a positive vision of the industry where potential new recruits to the industry perceive the truck driver career option as being attractive.

Affordable – lower or subsidised driver licence fees, endorsements fees and training course fees, loans available for driver training.

This set of interrelated 'positive visions' together point to a possible "reduced entry cost strategy", with an aim to make entry into the industry more affordable for potential new recruits.

Quicker – reduced time periods of waiting between licence classes, easy to gain the experience required to move up the licensing ladder to the top.

This set of interrelated 'positive visions' together point to a possible "reduced entry time strategy", with an aim to make entry into the industry faster for potential new recruits.

Attractive – good image of industry and heavy truck drivers, less bad press / media reporting, career option well regarded among school leavers.

This set of interrelated 'positive visions' together point to a possible "industry image strategy", with an aim to make entry into the industry attractive for potential new recruits.

Easy to get job experience – practical training / apprentice schemes, ban on passengers lifted to allow for 'informal off-siding' by potential recruits.

This set of interrelated 'positive visions' together point to a possible "work experience strategy", with an aim to make entry into the industry easier for new truck driver trainees.

9.2 A vision for improved retention

The research focus on 'addressing the issues and problems that affect retention' was re-framed within a driver-centred perspective as 'no incentive to look for another job'.

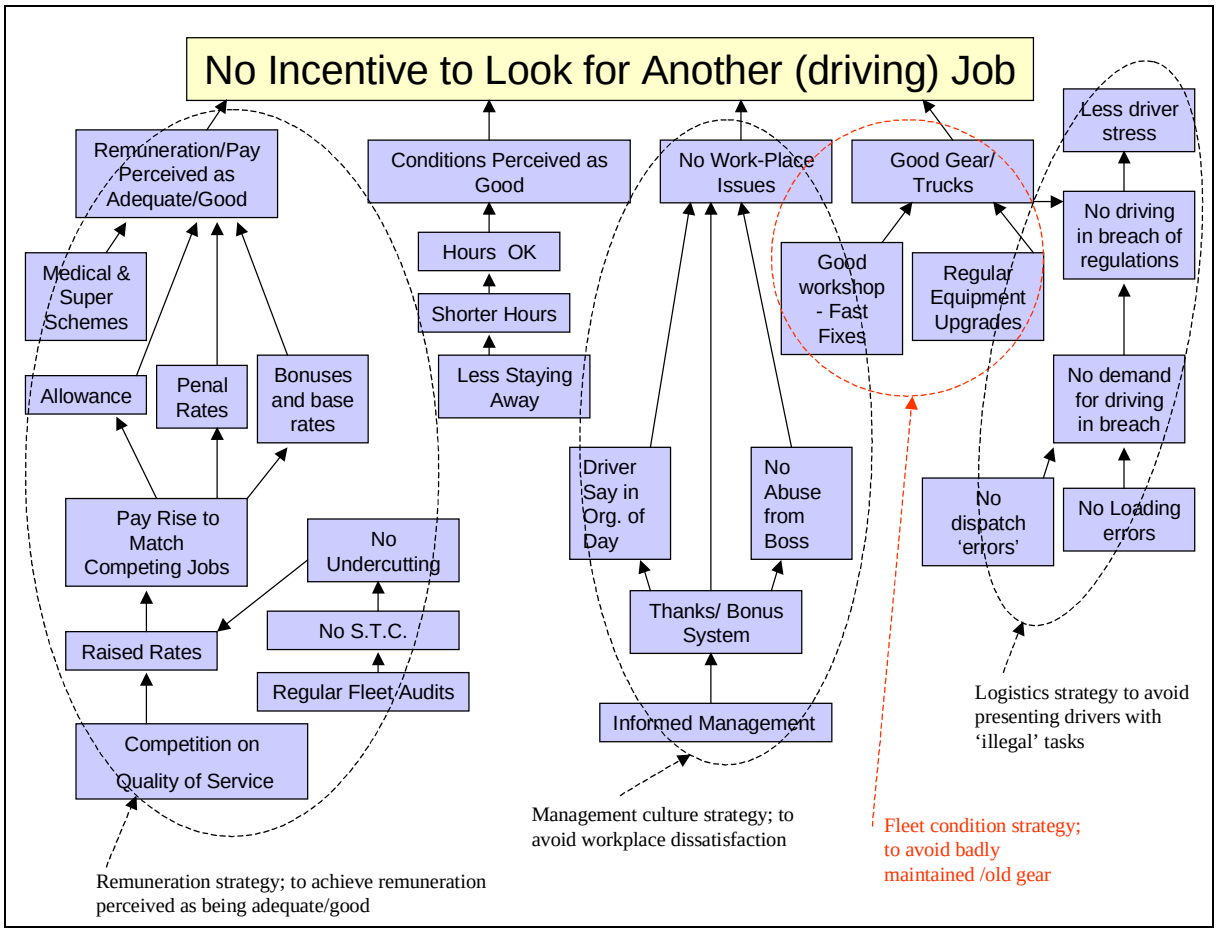


Figure 8 – Objectives tree of linked positive states, each expressing a positive vision of the industry from a driver-centred perspective as 'no incentive to look for another job'.

The five former 'areas of dissatisfaction' have been re-cast as five components of a positive vision of the industry, where heavy truck drivers see themselves as enjoying a job with:

- Good remuneration – the introduction of competitive pay rates, bonuses and allowances, plus medical and superannuation schemes; linked to raised haulage rates, competition on quality of service, no undercutting, no 'short term cowboys' and regular fleet audits as underlying support.

  This set of interrelated 'positive visions' together point to a possible "remuneration strategy", with an aim to achieve remuneration that is perceived by drivers to be adequate or good.

- Good conditions – hours OK, through reduced working hours and less staying away.

  This set of interrelated 'positive visions' together point to a possible "employment conditions strategy", with the aim of achieving conditions that are perceived by drivers to be adequate or good.

Strategies to improve employment conditions need to be sensitive to sector specific issues. See Appendices D (log truck drivers), E (stock truck drivers) and F (Dairy tanker drivers) for details of the issues that were raised specific to those sectors.

- Workplace satisfaction – drivers have a say in planning their day, receive thanks and performance bonuses, and are treated well by management; all linked to well informed management practice.

  This set of interrelated 'positive visions' together point to a possible "management culture strategy", aimed at avoiding workplace dissatisfaction.

- Good equipment /trucks - good workshop practice, prompt repairs and maintenance; and regular equipment upgrades.

  This set of interrelated 'positive visions' together point to a possible "fleet condition strategy", aimed at avoiding the use of badly maintained or old gear.

- Drivers stress free – no driving in breach of vehicle, load, driver or trip regulations; linked to reduced demand for driving in breach of regulation, through fewer dispatch or loading 'errors'.

  This set of interrelated 'positive visions' together point to a possible "infringements reduction strategy", aimed to reduce stress on drivers.

Easing compliance pressures

As driving in breach of regulations was much discussed as a generator of driver stress, the analysis was used to spell out in detail key components of a positive vision that would result in *no* breaches of regulations concerned with the *vehicle*, *load*, *driver* or *trip*.

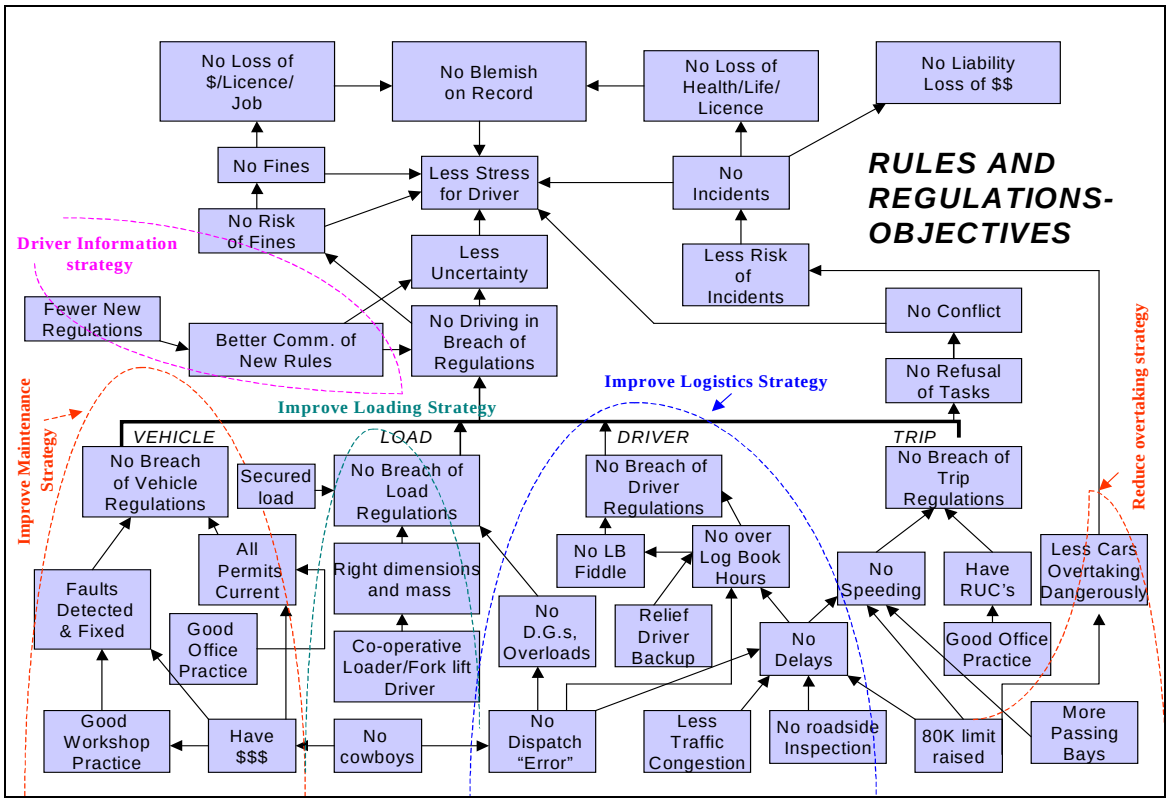


Figure 9 – Objectives tree showing key components of a positive vision that would result in no breaches of regulations concerned with the vehicle, load, driver or trip.

- No breach of vehicle regulations – faults detected and fixed all permits current; linked to good workshop and office practice. having $$$, and the demise of 'short-term cowboys'.

This set of interrelated 'positive visions' together point to a possible "improve maintenance strategy", aimed at avoiding presenting drivers with illegal vehicles to drive.

- No breach of load regulations – loads correctly secured and of the right dimensions and mass, thanks to cooperative loader and fork-lift drivers and no jobs involving dangerous goods or overloads".

  This set of interrelated 'positive visions' together point to a possible "improve load strategy", with two components; a "quality dispatch" strategy and a "quality loader drivers" strategy; jointly aimed at avoiding presenting drivers with illegal loads to haul.

- No breach of driver regulations – no 'log book fiddles' needed as no call for driving over log book hours thanks to fewer dispatch errors, availability of relief driver backup, fewer delays, less traffic congestion, and fewer roadside inspections.

  This set of interrelated 'positive visions' together point to a possible "improved logistics" strategy, aimed at avoiding presenting drivers with tasks that are impossible to perform without breaching regulations, and a possible "relief staff support system strategy", aimed at relieving drivers who run out of legal driving hours while still on the road.

- No breach of trip regulations – no speeding offences, RUCs paid and in the cab; linked to good office practice, and less overtaking by cars, supported by 80K trailer speed limit raised and more passing bays built.

  The last few 'positive visions' together point to a possible "reduce overtaking strategy", aimed to avoid dangerous overtaking of trucks.

- No unknown regulations – fewer new regulations and better communication of any new rules.

  This points to a possible "driver information strategy", aimed at avoiding inadvertent breaches due to unsuccessful communication of (new) regulations to drivers and /or others concerned.

- No need to refuse tasks - avoids conflict with manager over refusal, with less risk of losing the job and income.

- Less risk, uncertainty and driver stress. Drivers that know that they are driving within regulations are working in a situation of lower risk of a bad outcome and therefore *less driver stress.*

- No bad outcomes - no incidents, no loss of health, life or liability, no loss of $$$, no fines, no loss of licence or loss of income, and no blemishes on driving record.

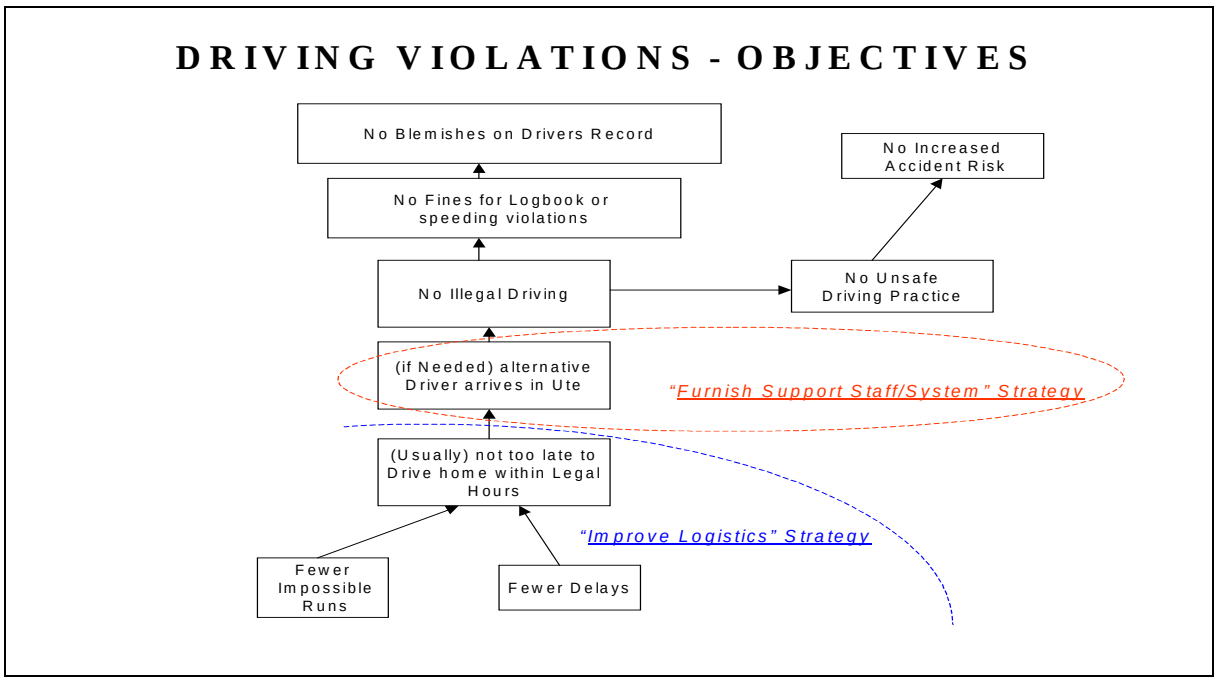


Figure 10 – Objectives tree showing key objectives of a strategy to reduce the number of driving violations.

10 STRATEGY FOR IMPROVED RECRUITMENT AND RETENTION

The potential components of the recruitment and retention strategy were derived directly from the analysis of problems and issues found in the in-depth interviews, and through use of the methodology for expressing these as "positive visions", i.e. where truck driver recruitment and retention are not adversely affected by issues facing the industry. The "objectives tree" maps used to describe these positive visions also provided a powerful way of defining broad approaches (*i.e. strategy components*) to turning these visions into reality. The qualitative findings of the employment patterns survey were then used as checks, to ensure that the components strategies identified by this process were valid and had not missed any issues or problems.

The systems diagrams presented problems and positive conditions that were found to fall within natural groupings reflecting the characteristics of the problems and conditions. These groupings led directly to the identification of the following strategy components for action. These are shown grouped into:

- Those that will improve truck driver recruitment
- Those that will improve truck driver retention; and
- Those that will bring improvement to both recruitment and retention.

10.1 Strategy components to improve truck driver recruitment

1. Reduce entry cost strategy – aimed at making entry into the industry more affordable for potential new recruits.

2. Reduce entry time strategy - aimed at making entry into the industry faster for potential new recruits.

3. Improve selection and training of new recruits – aimed at improving the percentage of trainees who successfully complete their training program and subsequently become proficient drivers.

4. Prospective new truck driver work experience strategy - aimed at making entry into the industry easier for new truck driver trainees.

5. Reduce skills gap – Aimed at ensuring potential recruits have the essential skills or attributes required to become good truck drivers.

6. Reduce the demand for new drivers - Aimed at improving the productivity of the current heavy vehicle fleet. This includes the reduction of empty running, increases in average payloads, and a reduction in down time at, for example, ports and through enforcement activities.

10.2 Strategy components to improve truck driver retention

7. Improve fleet / maintenance strategy - aimed at avoiding the use of badly maintained vehicles and to avoid presenting drivers with illegal vehicles to drive.

8. Infringements reduction strategy - aimed at reducing pressure on drivers to drive in breach of regulations.

9. Change enforcement attitude and philosophy – aimed at targeting enforcement action on persistent offenders and supporting driver and operator understanding of the legal requirements they have to meet.

10. Improve load strategy - aimed at avoiding presenting drivers with illegal loads to haul.

11. Improve logistics strategy - aimed at avoiding presenting drivers with tasks that are impossible to perform without breaching regulations.

12. Reduce overtaking strategy - aimed at avoiding dangerous overtaking of trucks.

13. Driver information strategy - aimed at avoiding inadvertent breaches due to unsuccessful communication of (new) regulations to drivers and others concerned.

10.3 Strategy components to improve both truck driver recruitment and retention

14. Industry image strategy - aimed at making entry into the industry attractive for potential new recruits and attractive for existing drivers to stay.

15. Existing truck driver work experience strategy – aimed at providing a career path for existing drivers that recognises the differing levels of skill

required to drive, for example, local delivery trucks and off-highway log trucks.

16. Remuneration strategy - aimed at achieving remuneration that is perceived by drivers to be adequate or good.

17. Employment conditions strategy – aimed at achieving conditions that are perceived by drivers to be adequate or good.

18. Management culture strategy - aimed at avoiding workplace dissatisfaction.

10.4 Reviewing the focus of action to take these strategy components forward

In designing the overall strategy, initiatives and action plan it was found that action could be grouped in the following way:

- Change to Government policy and consequential change to legislation, rules, systems, enforcement procedures and attitudes, and detailed administrative policies for which the Government is responsible.

- Action by the transport industry itself to change and influence industry wide, sector related and individual operator policies and action plans; and

- Action by both Government and the transport industry.

The table below shows how the eighteen individual strategy components listed in 11.1, 11.2 and 11.3 above were allocated to the above action groupings.

Strategy Component	Action through Government policy change	Action by the transport industry	Action by both Government and the transport industry
Reduce entry cost	principle action	supporting action	
Reduce entry time	action	supporting action	
Improved selection / training of new recruits			action
Prospective driver work experience			action
Reduce skills gap			action
Reduce demand for new drivers			
Improve fleet / maintenance		action	
Infringements reduction		supporting action	principle action
Enforcement attitude and philosophy	action		
Improve load		principle action	supporting action
Improve logistics		action	
Reduce overtaking	action		
Driver information		action	action
Industry image	supporting action	principle action	
Existing driver work experience			action
Remuneration		action	
Employment conditions		action	
Management culture		action	

Table 6 - Focus of action to implement the strategy components

10.5 Action by the truck transport industry

A review was then conducted of the strategy components identified as requiring action by the transport industry (either on its own or in conjunction with action by the Government). This review assessed the proportion of these strategy components that could be addressed by *improved operator performance*. Each of the strategy components listed in 11.1, 11.2 and 11.3 above were examined to identify:

- Whether operator performance was a contributing factor (marked "C" in the list).

- Whether improved operator performance would be sufficient to address each strategy component (marked "S" in the list).

The proportion of strategy components where operator performance was a contributing factor and which would be fully addressed by *improved operator performance* was then calculated.

Strategy component	Operator performance a contributing factor	Addressed by improved operator performance
Reduce entry cost		
Reduce entry time		
Improved selection / training of new recruits		
Prospective driver work experience		
Reduce skills gap		
Reduce demand for new drivers	C	
Improve maintenance / fleet	C	S
Infringements reduction	C	
Enforcement attitude and philosophy		
Improve loads	C	
Improve logistics	C	S
Reduce overtaking	C	
Driver information	C	S
Industry image	C	
Existing driver work	C	S

experience		
Remuneration	C	S
Employment conditions	C	
Management culture	C	S
Total:	12 of 18= 67%	6 of 18 = 33%

Table 5 - the significance of improved operator performance in a strategy for enhancing truck driver recruitment and retention

The results of this assessment strongly suggest that the majority of issues identified in the previous analysis would be partly or fully resolved through improved operator performance.

11 RECRUITMENT AND RETENTION INITIATIVES

The individual strategy components identified in Section 10 above are no more than pointers to the action required to address the recruitment and retention problems facing the industry. The strategy components need to be turned into an overall strategy and clearly defined initiatives that have clear objectives, timescales and resourcing plans. Also, as separate components for action, they are likely to lack the co-ordination and streamlining required to avoid inefficiencies and haphazard application. To avoid this risk, the project team has developed the following set of initiatives that, if agreed, would form the basis of the recommended action plan. The action plan needs to take into account the wider labour market, especially the shortage of people with similar levels of skill in other industry sectors such as forestry, agriculture, marine and fishing.

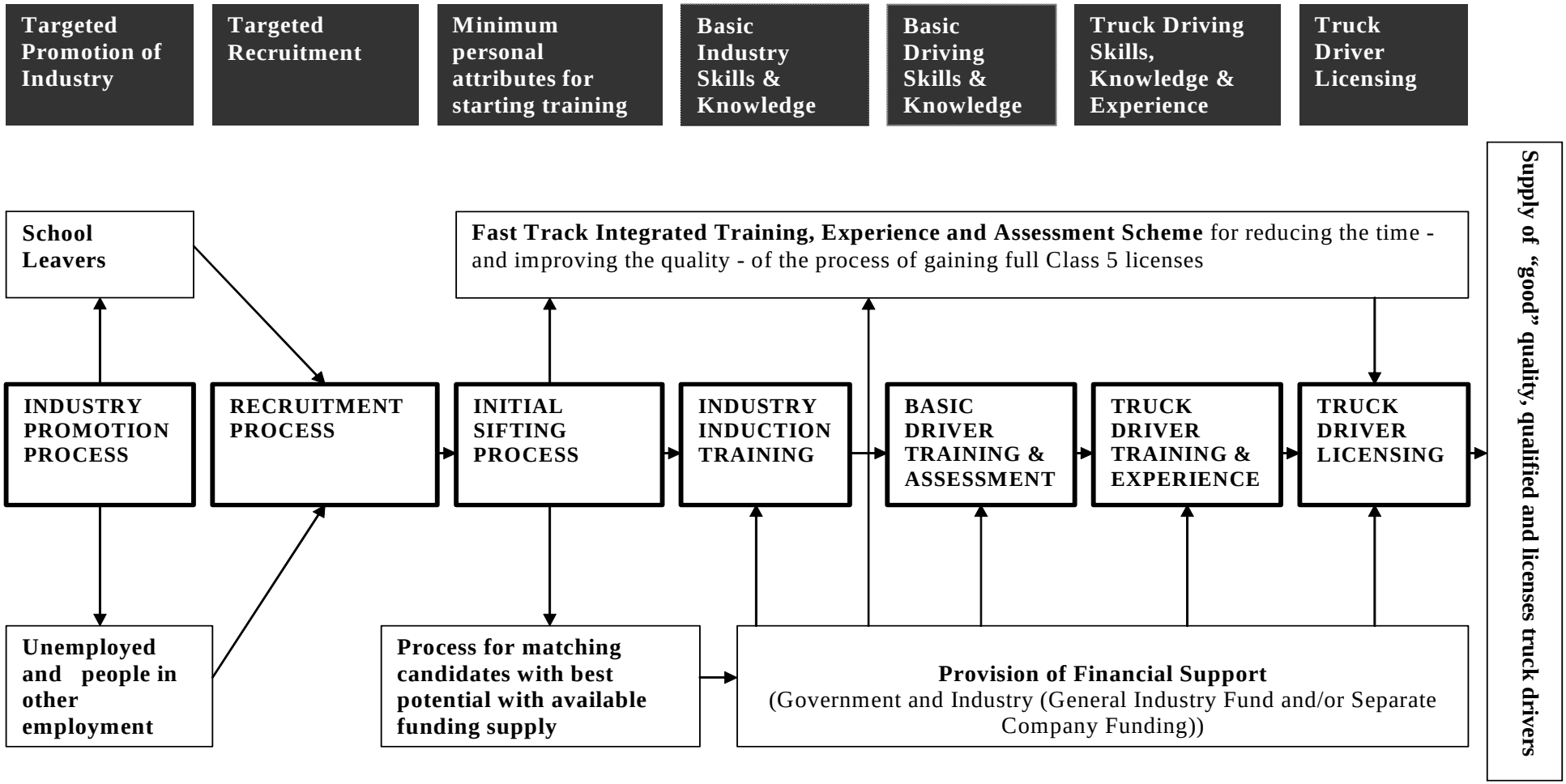
11.1 Initiative to enhance driver recruitment and training

Discussions with representatives of LTSA, Dept of labour, RTF, NZ Road Transport and Logistics ITO and others involved in driver training and assessment assisted in identifying the key elements of a structured and comprehensive initiative to improve the supply of "good" quality, qualified and licensed drivers to the industry. The elements identified were:

- Emphasising at schools the need to attain proficiency in the essential skills to become a skilled worker in the workforce.
- Targeted recruitment of people who are likely to make good truck drivers
- Sifting of potential entrants to the industry to ensure, before they start training, that they have the minimum personal attributes required to be good drivers
- Defining the basic industry skills and knowledge required by good drivers to guide the training of new recruits into the industry
- Defining the specialist skills, knowledge and experience needed to become a proficient truck driver
- Defining the basic truck driving skills and knowledge required before specialist truck driving training can be given, recognising the high level of skill required to drive, for example, log trucks.
- Streamlining of the truck driver licensing process
- Provision of financial support to prospective Class 5 truck drivers.

These elements are shown diagrammatically as a process flow chart in Figure 11 that illustrates how a new fast track integrated training, experience and assessment scheme would fit into the overall process of obtaining a truck driver licence.

Figure 11 - Improving the flow of good drivers into the industry – Developing an enhanced truck driver recruitment Process



In addition to speeding up the process taken to obtain a license, this scheme would aim to improve the driving competence and "quality" of truck drivers being trained by this route. The process chart also shows how an initial sifting process, that would take place prior to training starting, would be used to match candidates with the best potential with funding provided by the government and industry.

11.1.1 Targeted promotion of the truck transport industry

This study identified a number of groups of people who are likely to provide good sources for the supply of potential truck driver recruits. These groups are:

- Former truck drivers
- Aspiring truck drivers currently in other occupations
- "Inherent drivers" e.g. people working in farming or who have family members who are truck drivers
- School leavers
- Women
- New migrants
- People on the unemployed register

Following research commissioned by the RTF in 2000 to explore and measure barriers to school leavers considering a career in the trucking industry, the RTF has instigated a promotion programme aimed at raising the image of the industry in schools with school career officers and school leavers. It is recommended that similar programmes be implemented for the other groups identified above, especially women.

11.1.2 Targeted recruitment

In addition to implementing industry promotion programmes, recruitment campaigns targeted at the groups identified above should help to significantly increase the number of potentially suitable candidates putting themselves forward for the fast track integrated training, experience and assessment scheme and other training initiatives operated by individual transport operators.

11.1.3 Minimum personal attributes

The following definition of the personal attributes of somebody wishing to become a truck driver was developed during this study.

People who wish to become a truck driver must have a number of personal attributes that will allow them to acquire the necessary knowledge and skills to work successfully within the industry. Without these personal attributes new entrants into the industry will find it very difficult to be successful in the longer term. Following training they may also have difficulty satisfying the truck driver assessment requirements.

PHYSICAL

A person wishing to become a truck driver must be physically fit and carrying no injuries that could affect their on the job performance. This is particularly relevant to freedom from injuries to their back, legs, (particularly knees), and arms.

They must also be able to pass the medical fitness check as required by the Land Transport Safety Authority to obtain a heavy vehicle drivers license.

They must not engage in regular use or have a dependence on drugs and/or alcohol

MENTAL

Driving a truck is often stressful. Thus people who wish to do this must have the right attitude to the job and be able to:

- Accept the rights of others to use the road
- Display courteousness to other road users, law enforcement officers and fellow workers
- Maintain calmness when faced with an emergency or required to work under pressure
- Have the ability to learn and apply the learning in a practical environment
- Sustain performance under arduous working conditions and in pressurised situations.

- Accept and apply the disciplines of working within the law and of meeting the rules and operational policies of the companies they work for or do business with.

COMMUNICATION

The ability to communicate with others is an essential part of the daily routine of a truck driver. The methods of communication used within the industry are very broad and include verbal, (face-to-face and through a medium such as a telephone), by gestures and increasingly by transmitting of messages through the electronic media.

Whilst it would be nice for all people entering the industry to have well-developed communication skills in practice this will not happen and the best that can be hoped for is an understanding by the person of basic interpersonal communication and the ability, and desire, to improve on this.

A person who wishes to become a truck driver must be able to:

- Understand and interpret instructions given in simple English
- Hold a verbal conversation with others in simple English

LITERACY AND NUMERACY

When driving a truck a person will be required to write reports, complete timesheets etc and perform basic arithmetic. Thus a person wishing to drive a truck must be able to:

- Undertake simple arithmetic without the use of external aids
- Perform more complex arithmetic using external aids.
- Read and understand simple text written in Basic English.
- Compose and write simple text in Basic English.

These basic attributes are common to those required in many other areas of employment including forestry, marine, building and the agriculture sectors that

are also experiencing labour shortages. The attributes reflect the essential skills listed in the New Zealand Curriculum Framework (Education, 1993). That Framework identifies the knowledge, understanding, skills, and attitudes which all students must develop if they are to play a full part in the world in which they will live and work. The Ministry of Education's essential skills are:

1. Communication skills: including competency in listening, speaking, reading and writing and the ability to convey and receive information, instructions ideas and feelings appropriately and effectively.
2. Numeracy Skills: including the ability to estimate and to use calculators.
3. Information Skills: including the ability to identify, locate and process information, the ability to distinguish fact from opinion.
4. Problem-solving Skills: including being able to think critically and logically and to analyse problems from a variety of different perspectives.
5. Self-management and Competition Skills: including being able to manage time effectively, take responsibility for their own actions and decisions, and to have a range of practical life skills.
6. Social and Co-operative Skills: including being able to develop good relationships with others, take responsibility as a member of a group or organisation, and to act appropriately and responsibility in a range of social and cultural settings.
7. Physical Skills: including personal health and fitness, and the ability to use tools and materials efficiently and safely.
8. Work and Study Skills: including being able to work effectively both independently and in groups and to have the desire to continue learning throughout life.

Discussions with transport operators have highlighted the problem that exists in preparing people for the workforce. In the past under-achievers were able to obtain work digging drains and undertaking other menial work. However that type of work has now largely disappeared with the increase in mechanisation that has occurred.

It is now more important than ever for students to develop the essential skills outlined in the Ministry of Education Curriculum Framework. If they do not attain those essential skills they have a high likelihood of becoming unemployable.

11.1.4 Industry Induction Training; Basic driver training and assessment; On-Road training and experience

These three stages in the overall training process can be handled in a variety of ways depending on the preferences of individual transport operators. However, all three stages should be carried out - either separately or as parts of an integrated training programme - to maximise the potential for new recruits to become "good" truck drivers and who are likely to remain content to work as truck drivers for sustained periods of their careers. Detailed specifications of the content for each of these stages will need to be developed by the implementation project team.

11.1.5 Fast Track Integrated Training, Experience and Assessment Scheme for Class 5 licences

The findings of this study support the initiatives being taken by RTF to ensure any changes to the Driver Licensing Rule (Driver Licensing Amendment Rule) provide the basis for streamlining of the training, experience and assessment process required to obtain a Class 5 license. The RTF's proposals are focused on three distinct topic areas:

1. Accelerated progressing through the Graduated Driver Licensing Scheme. The RTF has proposed changes to the licence classes in the commercial driver GDLS regime, including revised vehicle weight thresholds. RTF proposes that the vehicle mass threshold for class 1 should be set at 6 tonnes for individual vehicles or combinations and that the current 15 tonne value for class 2 should be lifted to 18 tonnes (for combinations as well), with the other vehicle mass thresholds being left as at present. It is also proposed that drivers should be able to progress from class 2F straight to one of the other classes, including class 5. This would significantly reduce the cost and time required to obtain a class 5 licence. This would preserve the graduated licence process while moving towards the approach that has been adopted in Europe of having a simple 2-tiered regime.

   The RTF is also;
   - promoting a more stringent competency assessment under the modified Graduated Driver Licensing regime, particularly in the case of a class 2 full licence assessment; and
   - proposing that the Graduated Driver Licensing Scheme time bars should be reviewed for over 21 and over 25 year olds in order to attract drivers to the industry.

Consideration needs to be given to the introduction of faster ways in which older persons can obtain a class 5 licence. These people have the maturity but also often have family and financial commitments that can mean they are unable to become a truck driver if the process takes too long and costs too much.

2. The regulatory costs and how these could be reduced (reducing the number of licence levels in the Graduated Driver Licensing Scheme was part of this consideration).
3. Medical/eyesight declarations – The RTF argues that despite section 44 of the rule providing some relief from medical assessments, too many agents expect the medical assessments to be renewed at each full licence level. This is problematic and unnecessarily expensive. The RTF considers that if the candidate has a medical at class 2 this should remain valid for all endorsements and upgrades over the 10 year timeframe (Section 44 allows for a 5 year waiver). At each licence upgrade or endorsement within that period the candidate should be required to fill in a medical declaration confirming that nothing has changed that would materially affect the granting of a licence (refer to section 44(3)(a)(b)).
4. "Approved Course" Definition – The RTF also proposes that the term "approved course" should be amended to "approved assessment" and that the LTSA publicise the fact that training is not mandatory but the best option if an individual is planning on being assessed.
5. The accelerated learning programme
   The RTF sees the introduction of an accelerated learning programme as a good opportunity for industry to develop a fully mentored programme similar to that proposed by the American Trucking Associations and promoted to the Federal Motor Carrier Safety Administration. It has put this proposal to the LTSA for consideration.

In parallel, the industry is also in discussions with the LTSA on the development of an accelerated learning programme. The LTSA, in partnership with the industry, have indicated their willingness to trial a workplace-based competency training scheme that will allow a heavy vehicle driver to progress much more quickly than is possible at present.

11.1.6 In-service training

It has been clearly demonstrated that investing in the development of the people in an organisation will result in major benefits if that investment is undertaken in a structured manner that reflects the aims and objectives of that organisation. In the UK the British Government is encouraging the adoption of this approach through their $100 million "Investors in People" programme.

For transport operations, on-going investment in the development of drivers and other staff is critical for the improvement of safety and profitability. A learning organisation approach needs to take into account not just formal training but a culture that encourages drivers to seek new information, knowledge and experience on the job over their whole career as a driver.

An important part of being a driver is in understanding the operational requirements as well as the rules and regulations. There are also health and safety requirements to meet, including the management of stress and fatigue. These requirements keep changing and it is important that drivers keep up to date with those changes. Education through Police fines is not a good way to learn. Information needs to be readily available through multiple sources and different media so that it is easily accessible. Drivers need to learn how to access this information and to see it as part of their responsibility to keep up to date.

Organisations such as LTSA, NZ Police, OSH and the industry associations would contribute to their own aims and objectives if they were to more actively support transport companies with driver development. Increased emphasis on driver and industry education would result in increased compliance, reduced frustration on the road-side when stopped by CVIU, greater acceptance of Rule changes, and generally a more professional and safety aware industry

Options that can be used to support driver development include:

- Formal training towards the achievement of a truck driving related National Certificate
- Driver mentoring to assist drivers gain experience in, for example, off-highway forestry applications
- Driver discussion groups within companies and within regions aimed at raising driver awareness
- The use of the trade press as a means of conveying information to drivers
- The internet
- Fact sheets, newsletters and pamphlets
- Trade fairs and conferences
- Radio, audio tapes, videos, CR ROMs and Television

The interviews with drivers and operators highlighted considerable misgivings within the industry of the relevance of the NZQA unit standards and the truck driving related National Certificate. A number of those interviewed felt that

they derived little benefit from their investment in obtaining the unit standards and that they learnt very little new. Drivers felt that they received little recognition for having obtained a National Certificate. The credibility of the Unit Standards and National Certificates needs to be raised. Work is also required to ensure the qualifications mean something to clients and employers and their purpose is fully understood.

11.1.7 Stages of the driver education process

Figure 12 illustrates the various stages of the driver education process that are discussed above. An overall driver education and development strategy needs to be developed jointly by government and industry to ensure both initial and in-service driver education is part to of an integrated life-long learning process.

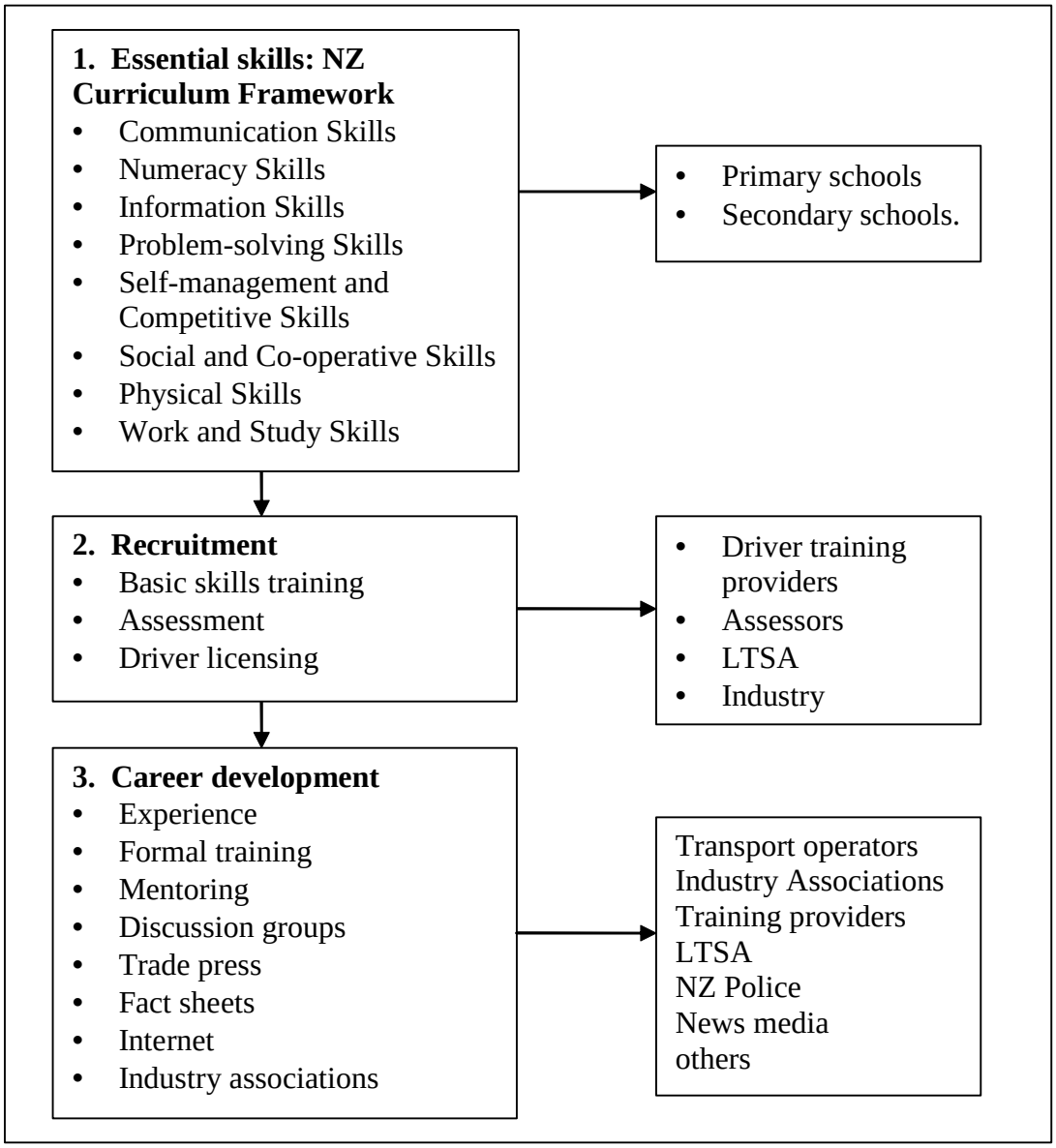


Figure 12 The three stages of driver development

11.2 Initiative to improve pay and conditions.

The highly competitive nature of the industry and the strength of the sector's major clients have a major influence on the commercial health and long-term sustainability of the transport industry. The result is a general lowering of standards to the lowest common denominator. This affects the sector's ability to maintain acceptable standards of health and safety, road safety and staff welfare and the pay and conditions that support the staff recruitment and retention rates required to meet the service demands placed on the industry by its customers. The pressures on the industry often lead to:

- Purchasers of truck transport services taking a short term view leading to haulage rates being squeezed below those required to maintain the general health of the transport industry and its long term sustainability.
- Established truck transport operators taking a short term and unrealistic approach to tendering for work.
- Many new entrants to the truck transport industry being under capitalised and not fully appreciating the economics of sustainable truck operation leading to them being willing to undercut the haulage rates needed for sustainable operation.

Action is required to:

1. Ensure transport operators price their services such that they are sustainable in the long term
2. Ensure the users of transport services act responsibly when setting the terms and conditions of cartage contract.

11.2.1 Sustainable Pricing

Action is required to:

- Ensure all transport operators price their cartage contracts at a rate that is sustainable in the long term. This will require training and information for operators to ensure they understand fully the financial implications of their pricing decisions and the adoption of cost models by every transport operator in the industry to ensure they can identify all the cost elements (such as long-term maintenance costs and fleet replacement reserves) that affect their business' long-term sustainability and profitability.

- Promote a much wider and deeper understanding of the true cost of providing transport service with the purchasers of truck transport services, with established operators, with new entrants to the industry and with Government.

- Encourage transport operators to take a longer term view of the haulage rates required to enable them to operate profitably, safely and in accordance with other aspects of essential performance and be able to afford the cost of improved pay and conditions for their staff.

- Encourage Government to investigate ways, including changes to Transport Service Licensing policy, of ensuring that new entrants to the transport industry are adequately capitalised and understand the economics of sustainable truck operation.

11.2.2 Chain of responsibility

There is a chain of organisations – ranging from freight forwarders to virtually all parts of New Zealand industry and commerce - whose activities depend on truck transport and whose policies, behaviour and performance impacts on the sustainability of the truck transport industry itself. As a consequence, these entities have responsibilities towards the transport industry that they need to recognise.

These responsibilities extend to all aspects of the interfaces between these organisations and truck operators. Action needs to focus on:

- Ensuring transport industry clients understand the need for sustainable pricing if transport operations are to be financially viable in the long term, are able to attract sufficient drivers and can meet their safety, social and environmental obligations. In other words, clients need to be certain that the rates are sustainable.

- Ensuring that the policies, behaviour and performance of all entities in the transport chain do not compromise the truck operators' ability to comply with the legal requirements for safe operation.

- Ensuring enforcement is focused on the persistently poor performing and negligent operators. This will help to reduce the perception held by all truck drivers that they are being unfairly targeted for enforcement.

The action under this initiative is likely to be more effective once the Operator Safety Rating System has been implemented.

11.3 Initiative to improve the standing of the industry and of truck drivers

This initiative is aimed at raising the standing of the transport industry, including truck drivers, both within the industry itself and externally as a means of improving both retention and recruitment. An industry and driving profession that is performing well and feels good about itself is more likely to retain staff, and existing drivers are more likely to encourage others to join their ranks. This will be achieved through formalizing and recognizing the various initiatives being introduced by transport operators throughout the country. It would include:

11.3.1 Media awareness raising of the importance of the transport industry

There is considerable public misperception of the importance of the industry to New Zealand's economy and the industry's initiatives to improve safety and its successes. This is reflected, for example, in view taken by many High School career councillors who regard truck driving as being one step up from being on the dole.

11.3.2 Recognition of the adoption of good practice

The standing of the industry will improve if its on-road performance is seen to improve. This can be achieved through the adoption of best-practice and the recognition of operators who adopt those standards. This area of operator performance improvement would be addressed through the promotion of the "Industry Standards" in a "Code of Good Practice" that is already being developed by the RTF. These industry standards will cover:

- driver on-road performance
- driver information and training
- driver health and welfare, and fitness for duty
- driver fatigue management
- fleet condition and maintenance
- vehicle loading
- safety related incidents and crash reporting

The Industry Standards will be based on *best practice,* not the legal minimum requirements set by law.

An associated "Performance Assessment System" is recommended that would provide a means of measuring individual operator and truck driver performance to enable that performance to be recognized in the market place.

11.3.3 Compliance and enforcement

Many of the people that were interviewed felt that there was a widespread "them and us" attitude between the Police, LTSA and drivers that is having an adverse affect on driver retention and recruitment. Views were expressed that:

- there needs to be a change in enforcement philosophies and attitudes;
- enforcement systems need to be improved to provide better targeting of serious and persistent offenders; and
- a major part of the role of Police and LTSA should be to support willing compliance through driver education, the raising of awareness of the legal requirements and through helping truck drivers and transport operators to identify ways to improve levels of compliance.

11.3.4 The encouragement and recognition of business excellence

The recognition of business excellence can be an effective way of encouraging improvement within the industry and promoting the achievements of the industry to the wider public. All aspects of an operator's performance should be considered including business planning, sustainable pricing, financial management, business efficiency, human resource management, process and systems, operational logistics and customer service. This area of performance improvement could be addressed through the introduction of a Business Excellence Assessment Process.

11.4 Reduction in the demand for drivers through improved productivity

While, in accordance with the terms of reference of the project, the report has concentrated on the recruitment of new drivers and the retention of existing drivers, there is a third means available to overcome the shortage of drivers. That is to improve the productivity of the industry. There are a number of means of achieving this:

1. Increase the payload carried through, for example, increased mass and dimensions and reduced tare weight.
2. Improve transport logistics to increase transport efficiency. Currently trucks are laden, on average, for approx 55% of the time. Productivity could be improved through, for example, increased back-loading and

improved scheduling. Considerable time is lost waiting for loading and unloading at, for example, the ports and distribution centres.

3. Reduce the cost of compliance with Government regulations. Each time a truck is stopped by NZ Police there is a cost to the operator in lost time. Greater targeting of truck inspections would result in improved levels of compliance and reduced cost to the industry especially if this was coupled with a greater emphasis on encouraging willing compliance. There are a number of other areas as well where the cost of undertaking business could be reduced.

If the driver shortage was only addressed through changes in mass and dimensions, average payloads would need to increase by approx 1.6 tonne for grossed out loads and deck length by over 800mm to eliminate the existing driver shortage of 5.5%. After that an annual increase in payload of 1.2 tonne and an increase in deck length (assuming overall height and width remain unchanged) of 600mm would be required to ensure truck and driver numbers did not increase beyond 2003 levels. Over a 5 year period this would equate to an average increase in payload of 7.6 tonne (to nearly 52 tonne GCM) and an increase in deck length of 3.8m (to 23.8m).

If the number of trucks and drivers were able to be kept at 2003 levels purely through improved logistics, utilisation levels would have to rise from 55% now to nearly 70% through, for example, increased back loading.

While it is not feasible to address the driver shortage purely through increased productivity, it should be considered as part of the package of measures.

12 CONCLUSIONS AND RECOMMENDATIONS

12.1 Scale of the problem

This investigation has found that there is currently an estimated shortage of over 1,250 truck drivers or 5.5% of the drivers required to move the country's goods on the road. This shortage is placing considerable pressure on existing drivers and the industry as a whole with existing trucks under-utilised and truck purchasing being delayed.

The industry is able to recruit enough drivers to replace those that leave through normal attrition but is unable to recruit additional drivers to meet the increasing demand for freight transport. The demand for freight transport is expected to grow by about 4% per year, requiring an additional 840 drivers in 2003. Unless action is taken to meet the increasing shortfall, there will be a cumulative shortage of over 4,000 drivers within 3 years (by the end of 2005) and about 10,000 by 2010.

The driver shortage, if not addressed, will have a major impact on the New Zealand economy especially as the level of skill required to be a driver is similar to those required by a number of other sectors in the economy who are also experiencing major labour shortages.

12.2 Overall recommended course of action

In designing a programme of action to implement the four initiatives identified in section 11, the first step is to agree on their relative priority. Feedback from discussions with the Project Steering Committee, and the results of the analysis considered earlier in this report strongly indicate assignment of the following priorities:

Highest priority.

A. Initiative to enhance the truck driver recruitment and training process (11.1).

B. Initiative to improve pay and conditions in the truck transport industry (11.2).

High Priority

C. Initiative to improve the standing of the industry and of truck drivers (11.3).

D. Initiative to reduce the demand for drivers through productivity improvements (11.4).

The speed at which these initiatives could progress will depend on:

- The degree of buy-in by all stakeholders to the initiatives
- The amount and quality of the resources that the industry can make available to carry out the work
- How these initiatives fit with the policy plans and priorities of relevant Government agencies

Effective implementation of the initiatives within a short time scale will demand that they are established as defined and accountable projects that have clear objectives, agreed resource allocations and target timeframes. This approach is recommended.

12.3 Industry/Government partnership

It is clear that the driver shortage is not an issue the industry will be able to solve on its own. Many of the issues are beyond the control of the industry, including the attributes of potential recruits and the driver licensing requirements. The shortage of skilled labour is a problem for a number of other sectors in the NZ economy as well, for example the marine, forestry, building and tourist sectors.

It is recommended that as the next step, the report be discussed with the relevant government agencies that are in a position to help address the driver shortage. These agencies and their potential roles are:

Department of Labour

A review of the Department of Labour's responsibilities has highlighted the key role they may be able to take in overcoming some of the obstacles the industry faces with driver recruitment and retention.

The Department of Labour has, as one of its responsibilities, to: "help build the capacity of communities and assisting them to identify and achieve new opportunities for sustainable employment". In the transport sector we have a "capacity problem" (a shortage of labour) rather than an "opportunity problem" (not enough jobs).

The key areas of the Dept of Labour's work programme for 2002/03 included:

- Developing and sharing information on future trends in work and their implications for the workplace, the workforce and future employment opportunities.
- Addressing skills shortages and skill development to increase opportunities for sustainable employment outcomes and support the development of a more skilled work force, including through developing and distributing information on jobs, skill needs, skills availability and vacancies.
- Actively identifying and supporting community capacity and capability building opportunities, including those focused on Maori and Pacific groups and communities.
- Researching and monitoring employment practices to inform and target interventions to raise awareness of best practice employment relationships so that problems can be dealt with by the parties themselves.
- Improving matching of migrant skills with opportunities to participate in the labour market, and increasing understanding that migrants' contributions create greater opportunities for all in New Zealand.

It is recommended that the report be sent to Department of Labour and a meeting be arranged with them at a high level to discuss ways in which DoL could assist. An important issue is the level of entry skills required for truck driving. The minimum attributes the industry is seeking are those listed in section 11.1.3 of the report. The Department could take a lead role in coordinating the activities of other agencies such as the Ministry of Education.

Land Transport Safety Authority

LTSA's role is largely confined to safety. The two key areas where LTSA needs to take a leading role are in:

3. Accelerating the process of obtaining a class 5 licence and extensions.

4. Ensuring drivers understand the importance of safety and the legal requirements, especially new requirements. While the LTSA Fact sheets are good, they are generally too wordy for an average truck driver to read. Many drivers do not like reading. Many drivers also do not receive on-going training and consequently very quickly get out of touch with what is expected of them. It is not sufficient to rely on the established driver training programmes or the enforcement regime. A LTSA communications programme aimed at truck drivers would improve safety and the retention of drivers many of whom expressed their frustration in not being able to obtain information easily on what is expected of them.

NZ Police CVIU

CVIU's primary role is in ensuring that the regulations are complied with to ensure transport operations are undertaken safely and the infrastructure is protected. It is recommended that the findings of this report be discussed with senior CVIU staff, MOT and Government Ministers to explore ways in which a greater emphasise can be placed on encouraging willing compliance rather than the current focus which is primarily on the issuing of infringement notices and fines. This change of emphasis would assist with driver retention as well as having safety and productivity benefits. This may require Government to reset the performance targets CVIU are required to meet.

Ministry of Transport

MOT's "business is to make sure there is an affordable, integrated, safe, responsive and sustainable transport system for New Zealand by 2010" (MOT Website). Clearly the driver shortage is a major impediment to ensuring that this happens. It is recommended that the report be sent to MOT and a meeting arranged to discuss ways in which Government can overcome the driver retention and recruitment problem the industry faces.

WINZ and Skills NZ

These agencies also have a role to play in addressing the driver shortage problem through supporting training and other initiatives.

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APPENDIX A ESTIMATED SHORTAGE OF LOG TRUCK DRIVERS

The estimated shortage of log truck drivers is shown in table A1. The regions are shown in Figures A1 and A2.

	2002	2003	2004	2005	2006	2007	2008	2009	2010
Northland	-60	-59	-19	-24	-16	-3	-4	-4	2
Auckland	9	11	12	14	16	20	20	22	23
CNI	19	-45	-93	-115	-114	-69	-56	-52	-63
East Coast	-36	-37	-19	-24	-42	-6	-17	-31	-15
Hawkes Bay	-21	-21	-11	-14	-9	-8	-7	-5	-2
SNI	-32	-35	-24	-38	-3	6	7	4	7
Nelson Marlborough	-8	-11	-20	-23	-11	-8	-12	-9	-12
West Coast	-1	-1	0	0	2	2	2	3	3
Canterbury	-2	-1	3	3	7	6	6	10	8
Otago / Southland	-1	3	1	17	16	20	28	31	34
Total	-133	-195	-170	-202	-154	-40	-34	-31	-16

Table A1 - Shortages of log truck Drivers by region

The decrease in the shortage of drivers that is projected to occur in 2006 to 2007 correlates with the point where the production figures start to flatten, the industry growth drops from 8% per year to less than 3%.

These results suggest that log truck driver recruitment should be targeted on a regional basis.

Figure A1 - North Island Wood Supply Regions showing Territorial Authority Boundaries

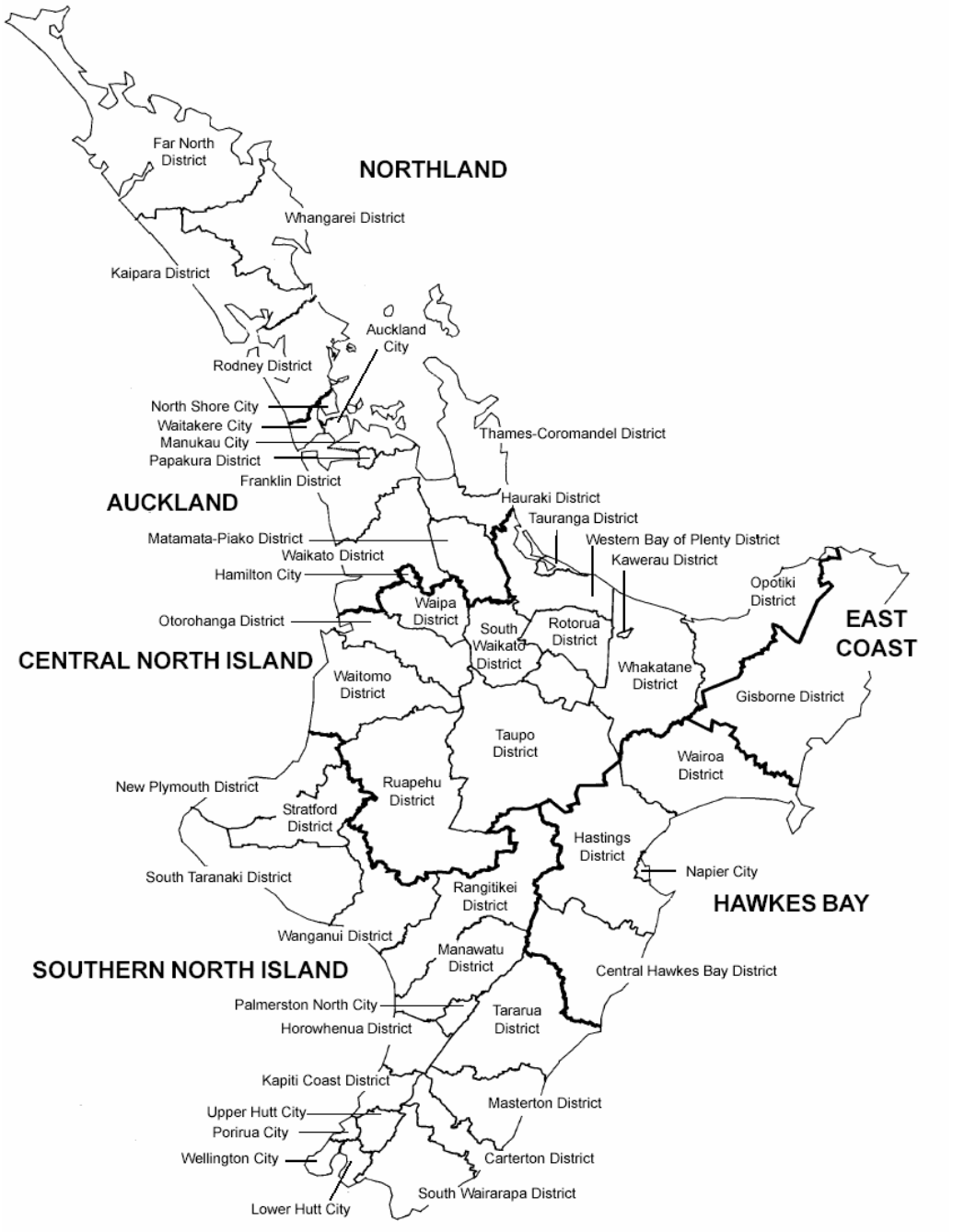
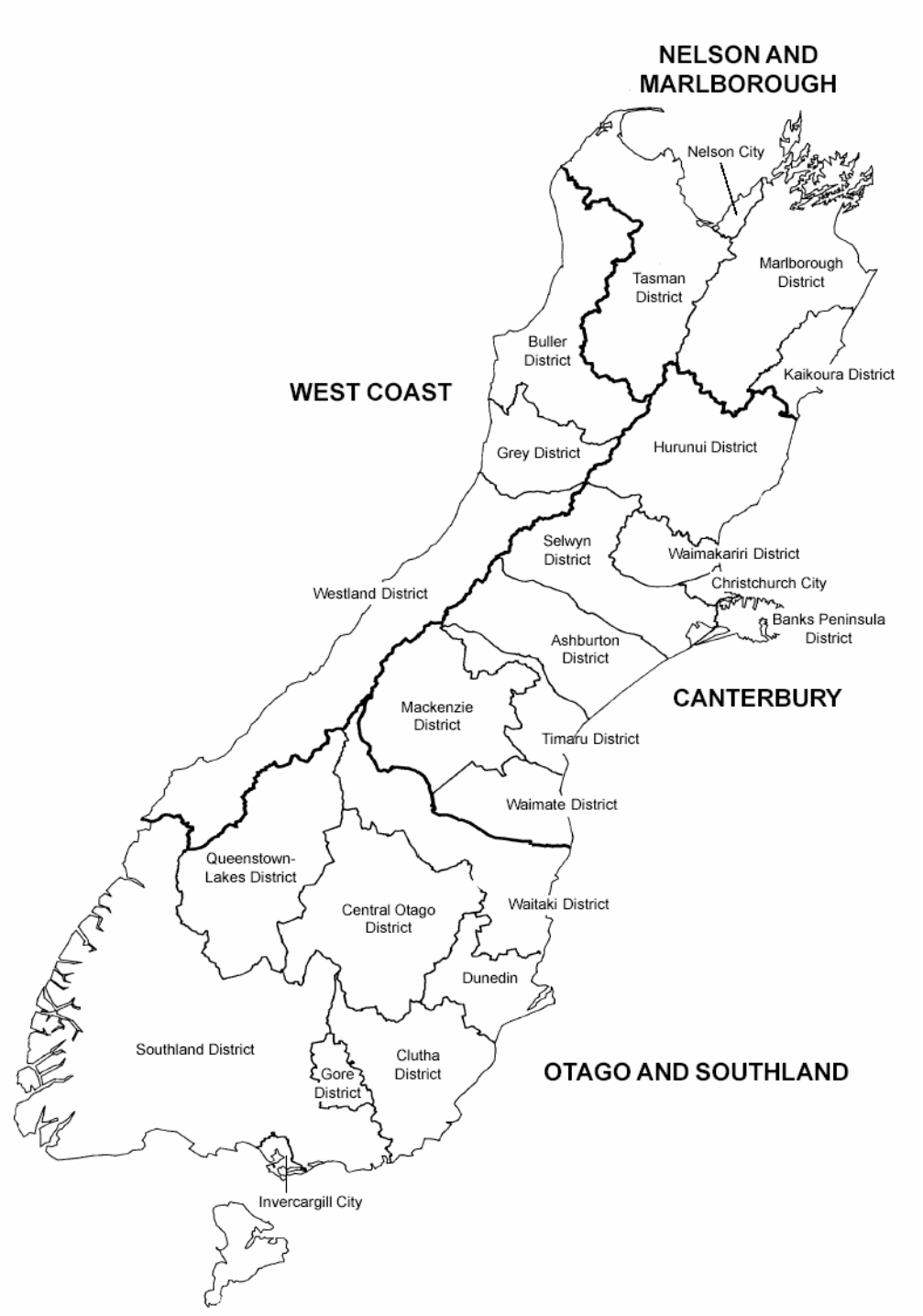


Figure A2 - South Island Wood Supply Regions showing Territorial Authority Boundaries



APPENDIX B DERIVATION OF ESTIMATED SHORTAGES

Estimated Log Production

The estimate of the number of drivers the forestry sector requires was based on the expected production figures for each region (Table A2).

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Northland	1.24	2.21	3.189	3.43	3.77	3.97	3.96	4.01	4.06	4.052
Auckland	0.72	0.76	0.807	0.85	0.89	0.91	0.90	0.92	0.93	0.94
CNI	10.02	9.11	8.199	8.83	9.57	10.83	11.29	11.53	11.69	12.02
East Coast	1	1.36	1.727	1.85	2.03	2.43	2.35	2.42	2.65	2.676
Hawkes Bay	1.1	1.44	1.784	1.94	2.14	2.25	2.34	2.41	2.45	2.455
SNI	0.86	1.39	1.922	2.13	2.43	2.47	2.41	2.36	2.38	2.373
Nelson Marlborough	1.96	2.05	2.140	2.32	2.49	2.56	2.59	2.69	2.72	2.812
West Coast	0.2	0.24	0.283	0.30	0.33	0.34	0.34	0.36	0.35	0.361
Canterbury	0.86	0.96	1.069	1.10	1.14	1.12	1.15	1.20	1.18	1.227
Otago / Southland	1.5	1.65	1.803	2.06	2.07	2.17	2.26	2.27	2.28	2.322
Total	19.46	21.19	22.92	24.81	26.86	29.05	29.59	30.14	30.69	31.24
TERNZ projection	19.47	21.23[P]	22.92	24.81	26.86	29.07	29.61	30.15	30.69	31.24
MAF estimates	19.87	25.22	28.61	28.81	28.76	30.09	30.66	30.93	31.19	31.24

Table B2: Estimated Log Production by Region

Production in millions of cubic metres of logs (1m3 is approx 1 tonne weight)

The numbers in the table are based on the NEFD Wood Supply Base Cut forecasts produced by MAF (NEFD 2000). The bottom row shows the MAF estimate of the expected increase in harvestable volume from 2001 to 2004. The actual harvest in 2001 and 2002 has been less than that forecast and it is expected that the volume will continue be less than the forecast for the next few years because of the time it takes to build the infrastructure and the industry-wide labour shortage. Figure A3 below shows the difference between the MAF projection and the forecast used in this study. The projections were calculated using an exponential trend line based on the actual figures for 2000 to 2002.

[P] Provisional figures ex MAF

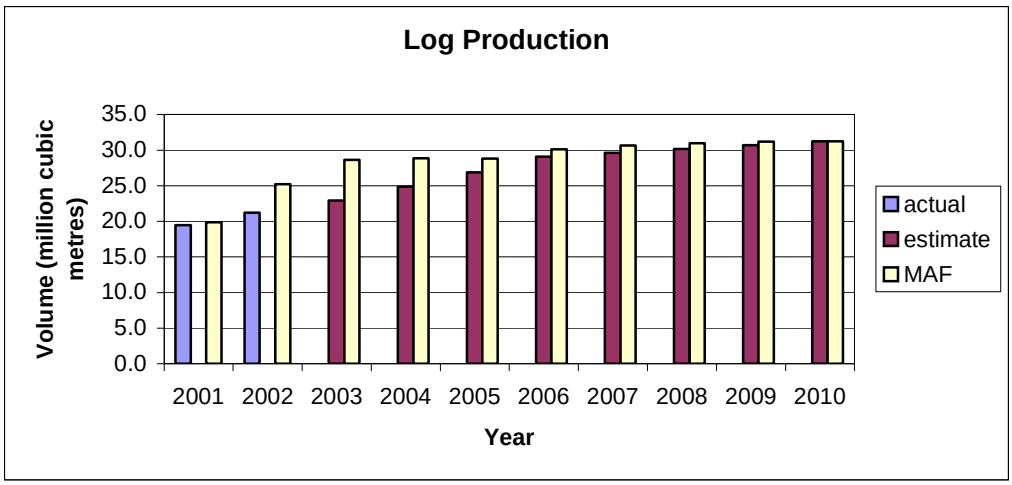


Table B3 - Difference between the MAF projection and the forecast used in this study

For the period up to 2006 an annual growth rate of approximately 8% has been used. For the years 2007 to 2010 the growth rate is projected to drop to below 3% per annum, in line with the MAF estimates. [MAF, 2000 #1]. Since the Asian crisis of 1998/1999 the growth in harvesting has been significantly greater year on year than in the previous decade and for that reason it is considered reasonable to project on the basis of the actual figures for the last three years only.

Estimate of the number of trips per day

An average payload of 28.5 tonnes per trip was used to calculate the number of loads. Transport operators in each region were contacted and asked what the average number of trips was per day per driver shift and the number of days worked per year in their region. From this the number of drivers required to move the logs was calculated.

The number of trips per driver per day is shown in Table B4, based on estimates made by the log truck operators that were contacted.

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Northland	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
Auckland	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
CNI	3.5	3.5	3	2.8	2.6	2.6	2.6	2.6	2.6	2.6
East Coast	2	2	2	2	2	2	2	2	2	2
Hawkes Bay	3	3	3	3	3	3	3	3	3	3
SNI	2.5	2.5	2.4	2.2	2	2	2	2	2	2
Nelson Marlborough	3.5	3.5	3.4	3.2	3	3	3	3	3	3
West Coast	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Canterbury	4	4	4	4	4	4	4	4	4	4
Otago / Southland	3	3	3	3	3	3	3	3	3	3

Table B4 - Trips per driver per day by year by region

Estimate of the shortage of truck drivers

In calculating the shortage of drivers, an industry average attrition rate of 7.4% was used. Table A5 shows the actual and projected number of drivers issued with Class 5 licences by region. It has been assumed that the forestry sector would attract its far share of the new Class 5 drivers.

Region	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Northland	38	59	93	118	146	173	201	228	256	283	311
Auckland	188	222	243	273	300	328	355	383	410	438	465
CNI	99	122	119	133	143	153	163	173	183	193	203
East Coast	10	13	17	20	24	27	31	34	38	41	45
Hawkes Bay	27	47	47	60	70	80	90	100	110	120	130
SNI	107	160	153	186	209	232	255	278	301	324	347
Nelson Marl	45	38	49	48	50	52	54	56	58	60	62
West Coast	8	17	20	27	33	39	45	51	57	63	69
Canterbury	44	66	81	101	119	138	156	175	193	212	230
Otago/Sthld	106	197	233	306	369	433	496	560	623	687	750
UNK	2	1	5								
	672	941	1055	1272	1464	1655	1847	2038	2230	2421	2613

Table B5 - Class 5 HT licence issues and projections

Projected new HT licences per region per year derived from LTSA registry statistics of HT licence issues by town or district for the years ending June 30th 2000 through to June 30th 2002. Licences per region have been projected using linear trend lines.

APPENDIX C IN-DEPTH INTERVIEWS – SURVEY STATISTICS

A survey was conducted of heavy truck drivers and other key groups in the heavy truck transport industry. The objective was to identify key workforce issues and gain an understanding of their significance.

Interviews were conducted

- between May and October 2002
- in the North and South Island of New Zealand
- with individuals and small groups of heavy truck drivers, ex-drivers, people in contact with drivers and potential driver recruits[6]
- in the workplace and on the job – in operations' offices, yards, smoko-rooms, in ports and depots, on the roadside, in truck cabs, or in drivers' homes.

The survey was limited to qualitative interviewing and assessment, as a quantitative assessment was outside the scope of the project. Hand-written interview notes of informants' responses were written during the interviews. These notes were later transcribed for analysis. The overall output from the in-depth interview investigations comprised more than 40,000 words of transcribed interview notes representing (frequently verbatim) interviewee responses.

Interviews completed

North Island	81
South Island	131
Total interviews	212

Truck drivers – career stage

Experienced drivers	121
New drivers	11
Owner drivers	8
Ex-driving	3
Total drivers	143

Truck drivers - gender

Men	121
Women	2
Total drivers	143

Transport operation managers

[6] The potential driver recruits were interviewed to identify what would attract them to the industry and what would diminish their interest.

Managing directors	22
Line managers	17
Total transport operation managers	39

Managing directors – operations scale

Operation with 10 or less trucks	5
Operation with 11 - 40 trucks	9
Operation with more than 40 trucks	8
Total managing directors	22

People in contact with drivers

Trainers / HR	9
Dispatch	11
Driver family members	10
Total in contact with drivers	30

Interviews by sector

Logs	72
Stock	10
Dairy	22
Metropolitan	23
Dangerous goods / fuel	3
Linehaul	19
General freight	17
Rural / contracting	39
Mixed / other	7
Total interviews	212

APPENDIX D IN-DEPTH INTERVIEWS: LOG TRUCK DRIVERS

The following is a summary of the comments made by the various people that were interviewed. The comments are largely quotes and consequently reflect differing views in the industry.

Shortage of labour

Not just log truck driving, the whole forestry industry is suffering from lack of people. Struggling to get drivers, but even bigger trouble getting harvesting people. They have known about this for years, now the shortage has arrived and everyone throws up their hands. Compare 10 years ago you couldn't get in, couldn't get a job as a log truck driver, there was a waiting list, you could only get a job if you knew somebody.

Weather and conditions

Log truck drivers mentioned the weather as a major nuisance – working in cold and muddy conditions, often wet through from standing in front of the truck in the rain while loading. But drivers said they also get some 'perfect days, which compensates for it'. In the past loggers didn't work in the rain, but now they do. Up at 2am, pouring down with rain. One hour drive to the skid, one hour loading, drive for two hours to the port, then mud again. Contrast with freight: truck already loaded, drive to Auckland, open the curtain, the job is clean and easy. It is driving only – other people do loading / unloading.

Hard work

People see log trucks on the highway – it seems easy. There is a lot more to it than driving. Loading a log truck with six wheels, when you load it, you have to mind the length of the logs e.g. 5 metres, mind the distribution of weight on steerers. It is a matter of trial and error and experience. Logs are unique, most people who come for a job haven't done logs before - high weight, high load, shorter trailer. Unrealistic expectations re the work involved. Logs are tougher; work in the bush, in the dark a lot. Much easier to do line haul. Logging - in the bush that's what makes the difference, steep hills, 45 tonne load.

Workplace issues

Dispatcher issues, loader driver issues, logging crew issues, issues over other drivers on the highway and night driving.

Log truck driver job skills requirements

Log trucks need drivers with more training as they work in more dangerous conditions, roads and machinery. A log truck driver needs to learn how to drive six-wheelers, then a truck and trailer. The job involves specific skills, using

specific machinery. It was suggested that once drivers learn the special skills that go with logs, they tend to stay with it. Specific job skills that a logging truck driver has to master include:

- using the RT (commonly three systems in cab, including CB radio and FleetLink);
- knowing when and how to back into a skid site;
- how to talk to the loader driver;
- operating machinery for loading trailer on truck; and
- load safety measures and load securing.

Learning log truck driving job skills

Companies start new drivers off-highway so they can learn off-highway driving skills on the job from experienced drivers. Hard to learn logging truck driving if not employed as a driver – forestry company rules say drivers can't have passengers.

Handling 400hp trucks

Older log truck drivers said young drivers have difficulty handling 400hp trucks. Example: a 22-year-old driver put a 440 hp truck off the road. Company scared of putting young guys in charge of $300,000 worth of rig. High loads require different driving style.

Environment and driver supply

The working conditions of log truck drivers were said to be so tough that they acted as a deterrent for new recruits to the sector. The logging sector would be able to find more drivers tomorrow if the drivers didn't have to go off-highway in forests where there is a 20% slope (1:5 grade) and poor soils. Off-highway driving requires skills and experience. Off-highway road quality determines required driver skill level. Regional differences in conditions and roads also call for specialised driver skills. Some of this variety is traceable to changes to logging in smaller forests.

Poor roads and maintenance off-highway

Forestry companies were said to be cutting their roading costs, putting less rock in the roads. They only put on as much as they have to, as it is a cost. Engineering into the forest was said to have deteriorated in the last 3 – 4 years. This makes for more difficult conditions for the drivers to negotiate off highway. Drivers said that forest owners don't want to spend money on the logging roads. An example of this was sending in a grader once a week only, regardless of the weather and the state of the road. Wished for better roading and loading sites. Recent improvement claimed: now sometimes metal is put on bush roads.

Fear of Accidents

Industry puts pressure on drivers, always on the maximum hours in logbooks. Logbooks were said by drivers to cause accidents – before logbooks there was less pressure to drive all the time that you are allowed. There is pressure on drivers to get the truck back in a day. Delays in port and bush put more pressure on drivers – waiting for loader and unloader. Longer leads, with a longer drive to skids, adds to the pressure. One of the risks associated with being a log truck driver is that if a driver has an accident, he / she will get a dangerous driver charge and be unemployable – that driver is not likely to be employed afterwards on a good contract from e.g. milk transport.

Tough working conditions reason to quit

A driver had left one company two weeks before the interview. The driver had come from aggregate work and went back to aggregate work, due to working conditions. Driving log trucks is hard and often dirty work, driving and working on dirt roads in the bush, handling heavy chains, securing the loads etc., - compared with for example chip cartage, which involves little physical work or dirt. The whole of the logging industry was said to be dirty work, particularly in the North where the clay is extra sticky.

Compliance

Stress from perceived 'targeting' of log trucks by CVIU and Highway Patrol, with multiple anecdotes of 'being treated as criminals' by enforcement personnel conducting inspections of their trucks in search of opportunities to hand out infringement notices that will cost the driver a portion of his / her income.

Industry image

Log trucks were said to have a particularly bad image with an unattractive safety record, instilling fear in other drivers on the highway due to a number of much publicised traffic accidents involving log trucks, including some resulting in fatalities. This was said to be part of the reason behind the current public-relations practice whereby log trucks carry a sign '0800 LOGTRUCK' plus an identifying code number at the back, inviting anybody to ring up with complaints about their driving

Career path and progression within the industry

Forestry typically try to capture the most experienced drivers – the average age is high. Most drivers are in their 40's or 50's – they don't usually start driving log trucks before they are 30 years old. The end of a log truck driving career may require a shift to easier work due to age – the work getting harder to do.

Pay Rates

Pay rates seen as low, with top log truck drivers defecting to milk tankers for better pay and conditions. When the Employment Contracts Act came into force, most log truck drivers lost all allowances. The present pay rate averages out at $11-$12.50 with time and a half and double time. Drivers work 70 hours a week with few exceptions. With hard-to-beat competition on pay rates for the most experienced drivers, from especially the dairy industry, most log truck operations have had to hire an increasing proportion of less experienced drivers, which was seen to have made things worse – "pay peanuts and you get monkeys". Drivers themselves suggested that to retain their experienced drivers, log truck operations need to reconsider the pay rates and pay comparable dollars to competing parts of the industry. It was not unusual to encounter cases of individual top drivers enjoying a personalised higher-than-average rate of pay, usually offered in direct response to the driver making moves to resign for a better paying job.

Dairy industry 'poaching' experienced drivers

There was much talk about 'poaching' drivers in the current climate of shortage of experienced drivers. Dairy industry across the country was said to have taken 500 drivers out of the rest of industry by offering good money and conditions.

Health and Safety

The job involves a lot of noise and also shouting. Some drivers wear earplugs for hearing protection but then they can't hear the RT. Driving was said to "wreck your back", as drivers bounce and shake in the cab all day. Drivers are sometimes wet through all day, flu several times a year, protective clothes don't help, carry a change sometimes. Three changes of clothes in one day is not unusual.

Accident rate

Said to be related to truck type, log length and load height. The only loads rolling over are the high ones, but operators use six-wheelers as they are the only trucks that can access the type of country. [This topic suggests a partial solution to the shortage of experienced drivers: forwarding of logs to the front of the forest, or construction of better roads to minimise the need for off highway driving in steep country. It would reduce the need for such high level of special off-highway driving skill among (at least some) log truck drivers. An added bonus would be reduced need for sub-optimal configurations on highways, with reduced crash risk from truck roll-over.]

Consistency of work

There is a lack of continuity of work for the log transport operator. The client asks for 24-hour per day log transportation, then drops it with short notice. While it causes difficulties, it is not so bad for a large company, but for smaller operations it is very difficult to cope with both peaks and troughs in demand. Log truck drivers' expectations were generally based around a seventy-hour week. Slow periods, with fewer hours, and hence lower income, was cited as a reason to quit and go to another job that would allow the driver to work a 'full' (= 70 hour) week to maximise income.

Hours of work

Logs go all day. The port shuts at 12 - in the past 5pm on Fridays. These times set the parameters for each day. Drivers flat out getting it done in time. Each truck works double-shift, main driver drives 5–13 hours, then puts on relief driver for rest of time. Long hours, also inflexible. A driver makes two or three trips in a day; if one trip is held up, the driver has to do long hours, even over logbook hours, just to get the truck home. Some of the drivers interviewed said that a typical weekday could included:

2 am - get up, drive ute to bush
2:45 – arrive at truck, begin working day
5 pm – back in the yard, get ready
6:30 – arrive home
7 pm - dinner, then recreation
10 pm – in bed for four hours sleep

Comparing this typical day with log book rules, it was suggested by drivers that they don't really have a 10 hour break, as they have an 18-19 hour day and only 4-5 hours sleep. In addition to this it was not unusual for part of Saturday being spent at the depot washing the truck (or, at the time of the interviews, participating in driver training to meet recent client demand for NZQA certification of log truck drivers)[7].

Staying away

In the past log truck drivers were said to have stayed away once a month at most. Now some are away Monday to Friday, most stay away 2 – 3 nights a week. This is because in the past the focus was on local forests, now drivers go anywhere for logs.

[7] The log transport operators spoken to do not agree with the above timetable and do not believe that it is at all normal.

Gender

Some issues over bodily / muscular strength, especially when required to throw chains across loads of logs, and tightening the sprockets when belly-stropping the load, both of which had proven difficult for women drivers in the past.

Training

NZQA unit standards and driver training. Some log truck drivers talked of studying for or having completed the National Certificate of Road Transport. While this is not (yet) compulsory across the sector, there is a present (client-driven) trend towards forestry companies requiring certification of log truck driversfor access to their specific forests / skid sites that.

Dispatch issues

The people on dispatch control every move drivers make all day. The drivers don't like it much, they get stuffed around. They are run by the dispatch organisation - a big dispatcher, owned by truck companies. They were said to be hierarchical, work with arrogance. Drivers and operators don't know how to change this situation. Dispatch will say: "Take a bag!". This means the driver will not get home that night - but the drivers don't know where they're going to be that night. They allow the drivers no say in what they do. The employee has little to do with the employer during the day. If you don't actively see them, all they do is work as slaves for the forestry companies. "This is one reason we lose drivers. The big slick corporate master / servant relationship has done the industry no good. You are always measured by your last mistake".

Loader driver issues

Trouble with loader drivers not giving good enough instruction to find sites. Loader drivers can make it harder / easier for you - the way they load your truck can get you into trouble. Drivers have a procedure for recourse: if you're not happy, you can go to a supervisor, but there is a downside to that as you need to use the same loader driver the next day, and it does not pay to get on the wrong side of them as they can cause you a lot of trouble if they want to. It is a precarious relationship, drivers said you have to treat them well "even if you hate them". With a good loader driver, you don't need to say anything. If you have to explain, the guy is not a good loader driver.

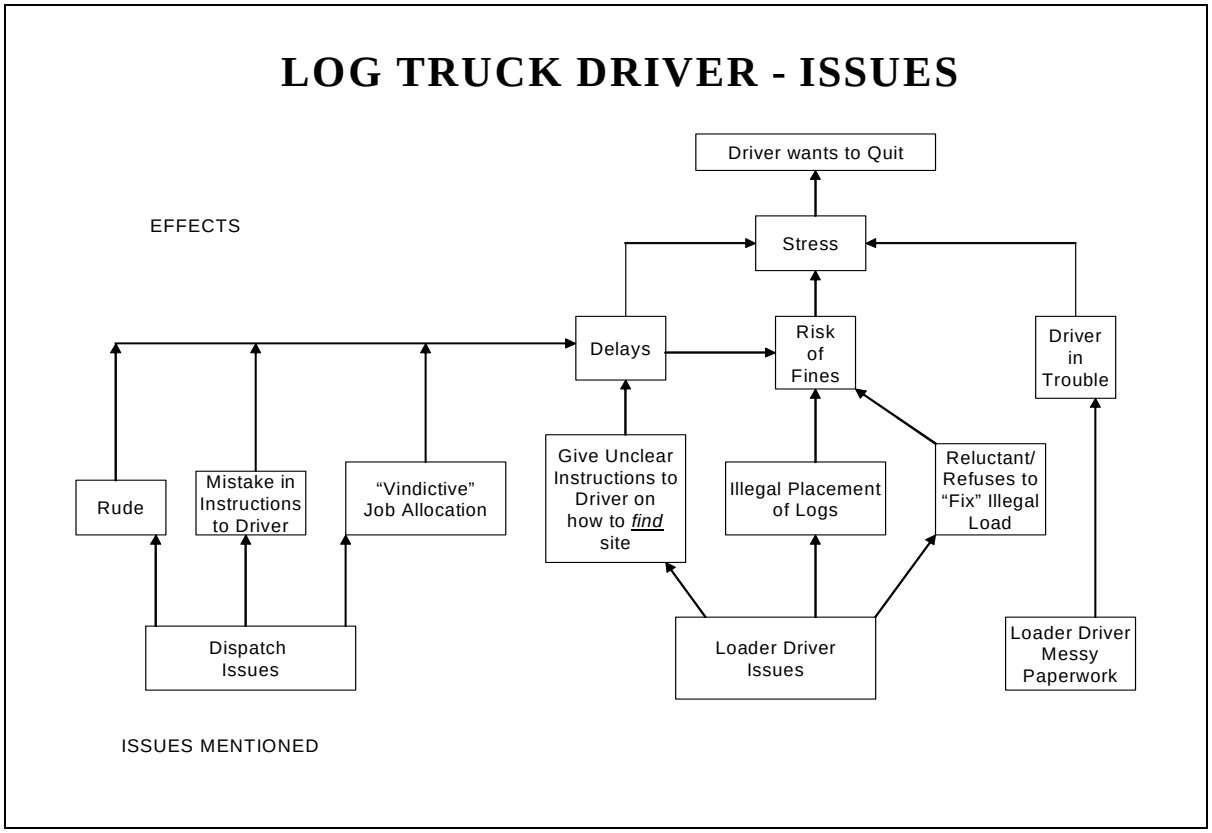


Figure D1 - Log truck driver issues

Logging crew issues

There is sometimes conflict in the interaction between the harvesting crew and the truck driver. Doesn't create a team spirit, no common goals. The truck driver will complain about the way the skid is and the time it takes. In the view of the loader, drivers are sometimes pedantic and can be difficult: "take one log off, put one on". But neither driver nor loader has control over the other. The defined roles were said to be 50% of the problem. As a contrast, the company drivers will get on a loader, or mark logs, if no-one else is there to do it.

Log truck drivers complained about the 'bush rule' that requires a driver to stand by the cab during loading. Not only was this said to be dangerous, but it prevents the log truck driver from directing the loader driver. This is unfortunate, as there are precise regulations about how much the logs need to stick out beyond the staunches – by the time the loader driver has finished it is too late to fix any misplacement of logs or to ask the loader to fix it, leaving the driver to drive on the highway with an illegal load. Not all loader drivers know in detail what is required: load height, measurement on the staunch (150 mm, plus belly-stropping, or 300 mm and no belly-strop). 50% of loader drivers were

said to not be well-trained - "loader drivers are a source of dangerous situations". In the past they could throw the docket out of the window and take off if a driver complained about the position of a log; now the onus is on the logging crew to provide a loader.

Weight issues

Most log trucks and trailers have on board scales, but sometimes a load ends up half a ton over. A waged driver does not get paid extra for carrying extra weight, but sometimes you need another log for safety, even though this puts you over the limit (as logs load in pairs).

Enforcement targeting

Log truck drivers get a tickets for driving at a speed of 83 km/h, or 86 km/h, while line haul drivers gets away with driving at a speed of more than a hundred. Drivers said the problem is not CVIU or police; it is Highway Patrols, "bumblebees", that are the problem, issuing infringement notices to log truck drivers for doing 90 km/h. New rules followed a big accident that caused four deaths. Before the rules, it was fun, but now it has all changed. No glamour in it any more. Just serious all the time with all the rules and regulations.

Compliance pressures

Log truck drivers have more rules and regulations to cope with than most. To the laws of the highway are added the rules that regulate driver behaviour when off-highway in the bush or on a skid site – usually safety oriented rules designed to prevent injury in a dangerous environment with large machinery being used. The specifics of these rules differ from site to site, depending on the policy of the relevant forestry company. Different forests, everyone has different rules. Different weigh bridges, different ways in which they work, and different ways in which you use them. Every bush is different – different companies have different safety rules and also rules for when loading. Fletcher/Carter Holt rule: have to fill the truck before you start to chain it up, and have to stand in front of your truck while loading (which was said to be not ideal). When the logs are harvested with a mechanical harvester they all have to be belly-stropped, due to slippery (barked) logs. The rule is logs five metres or less need belly strops. More new things to learn: specifics of radio use in bush – on channel 69 (all vehicles in Carter Holt bush).

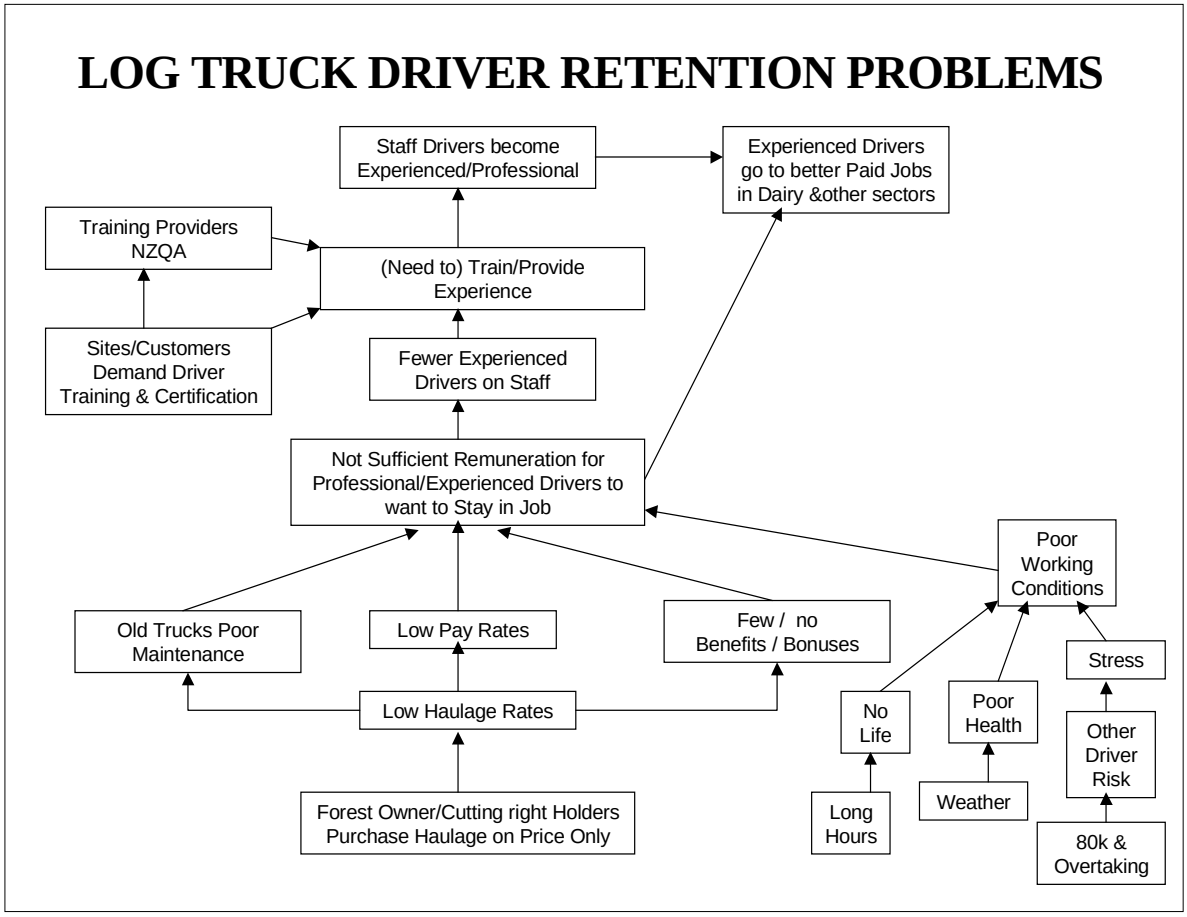


Figure D2 – Log truck driver retention problems

Being caught in breach of these site specific 'bush rules' can be just as consequential for a driver as being caught in breach of highway rules by the CVIU. An operator told of a driver who had just graduated off DEKA driver training, but was not fully up to speed as a driver. The operator took him in, the driver drove with somebody else for a week. Then he was given a truck and a task: one load a day only. He got caught by a supervisor chaining up a load while the loader driver was away. He was banned from their sites for a year, and so lost his job.

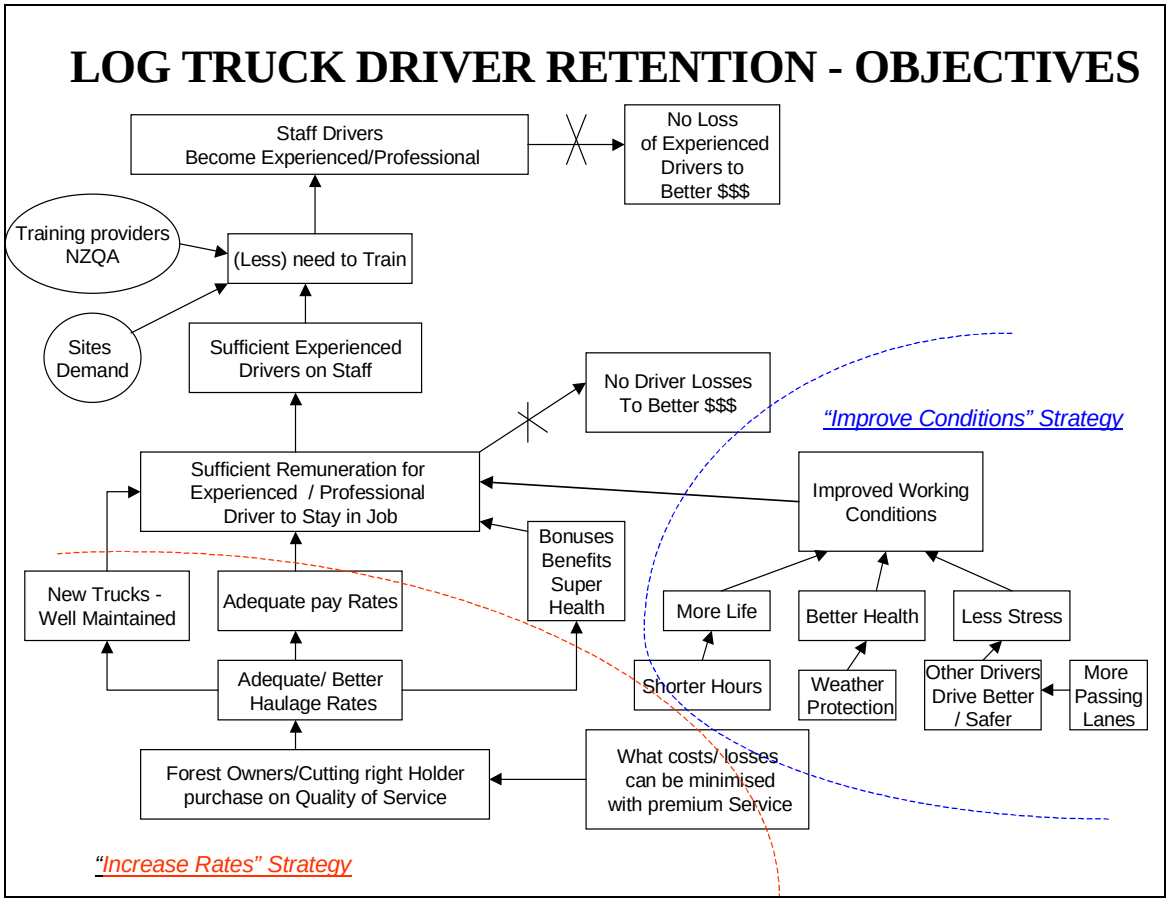


Figure D3 – Log truck driver retention - objectives

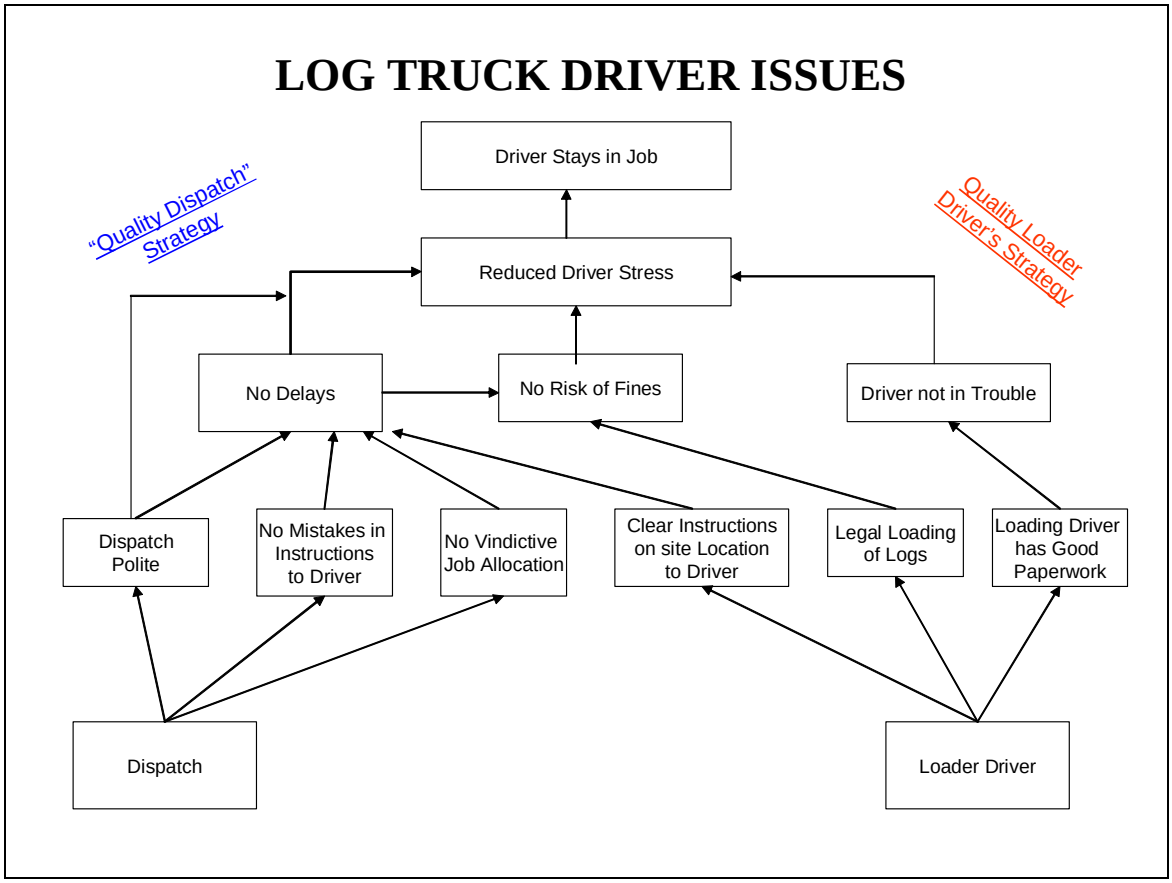


Figure D4 – Log truck driver issues expressed as positive states

APPENDIX E IN-DEPTH INTERVIEWS: STOCK TRUCK DRIVERS

The following is a summary of the comments made by the various people that were interviewed. The comments are largely quotes and consequently reflect differing views in the industry.

Recruiting and retaining stock truck drivers

Problems with both recruiting and retaining stock truck drivers. Stock truck drivers quit and move to e.g. refrigerator trucks – "clean hands" were contrasted with "picking up bobby calves in the freezing cold".

Substandard farm facilities

Farmers need to upgrade facilities and build bobby calves' runs off the ground, so drivers don't have to lift them. Need to tell clients: "your stock loading facilities are below standard or dangerous; if no upgrade, pay a premium". (Afterthought: "But then we may lose the work to cowboys").

Four decker trucks

The height, plus the fact that stock don't stand still, means that driving multi-decked units requires great skill. Three decks were said to be relatively easy to handle; with four decks, "one mistake and you've fallen over" – allegedly already several the season of the interviews.

Horned animals

Horned animals were an issue for drivers, who would prefer not to have to transport any horned animals at all. They are prone to cause injury to other stock during transport, and also tend to rip the obligatory tarpaulin covers if carried in the top tier.

Animal welfare

Stock is alive, the driver has to take responsibility for their welfare which constitutes special problems and causes extra stress, especially in case of breakdowns.

Driver responsibility for welfare of animals

The responsibilities of the driver is not just driving, but extends to welfare of the animals being transported and documentation to get them into the works, e.g. TB status declaration forms. If there are errors in the documentation, such as showing the wrong number of animals, the works won't take the stock, and the driver has to return them to the farm. All this responsibility is loaded on the stock truck drivers.

Paperwork issues

Stock truck drivers argued that the paperwork should be stock agent responsibility. Stock agents get paid a draft fee to procure the stock and put them in the works, but it doesn't always mean that they sight them. Stock agents should take animal declaration forms to the farmer. Drivers would prefer it if the animal declaration forms weren't even in the truck. At present, if a stock truck drives out for a pick-up and the driver finds no paperwork, he has to drive back empty, which amounts to a loss. Drivers spoke of lots of drives up the valley with paper and forms, "doing other people's work". This slows down the stock work – compared to a load of shingles for the same rate.

Sick animals

Drivers have responsibility for deciding if an animal is ill. If the job is to pick up twenty cows, and one turns out to be sick, the driver gets the blame. Plus there is pressure to do it fast. Unless drivers train as veterinarians, they are not always able to accurately identify swollen feet, broken limbs or animals that have had treatment but are not yet good enough to be transported.

Farmer complicity

Driver needs to be told about sick animals, but farmers do not always let the drivers know about animals in the consignment that are unwell. This is because farmers treat the meat works as a dumping ground for stock that they want to get rid of (such stock is after all only a by-product on a dairy farm). It is the cheapest way to get rid of old stock, while claiming the animals are fit for transport.

Excrement

If stock is covered in excrement, drivers can't pick them up, as the works won't have them in that condition. MAF animal welfare people were said to not actually go on farm to see the stock.

Bobby calves and leptospirosis

Stock truck drivers reported problems with diarrhoea and vomiting when working with bobby calves. Conditions: wet and covered in excrement, exposed to leptospirosis. Stock truck drivers get leptospirosis, but don't get ACC compensation for loss of income, as it is classed as a disease and not an accident that would entitle a driver to such compensation.

Effluent dumping fines

If the farmer doesn't make sure that the stock is "stood off" (i.e. kept from eating, to empty out their stomachs) before being transported, drivers have trouble with disposing of the effluent that accumulates during the journey. There are few

sites for effluent dumping, and heavy fines are imposed for illegal dumping in the environment.

Single man's game

Stock trucks were deemed to be "a single mans game", less suitable for a person with a family, as they spend a lot of time away from home.

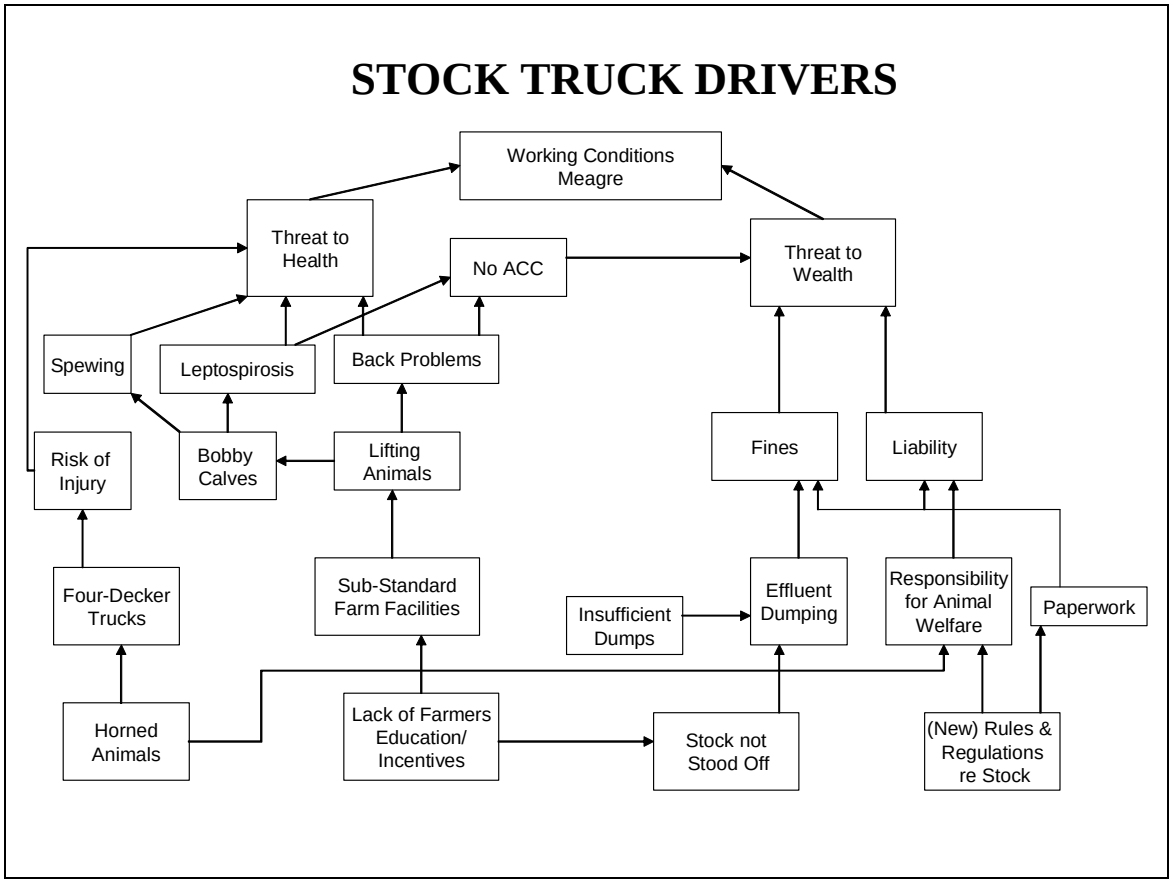


Figure E1 - Stock truck driver issues

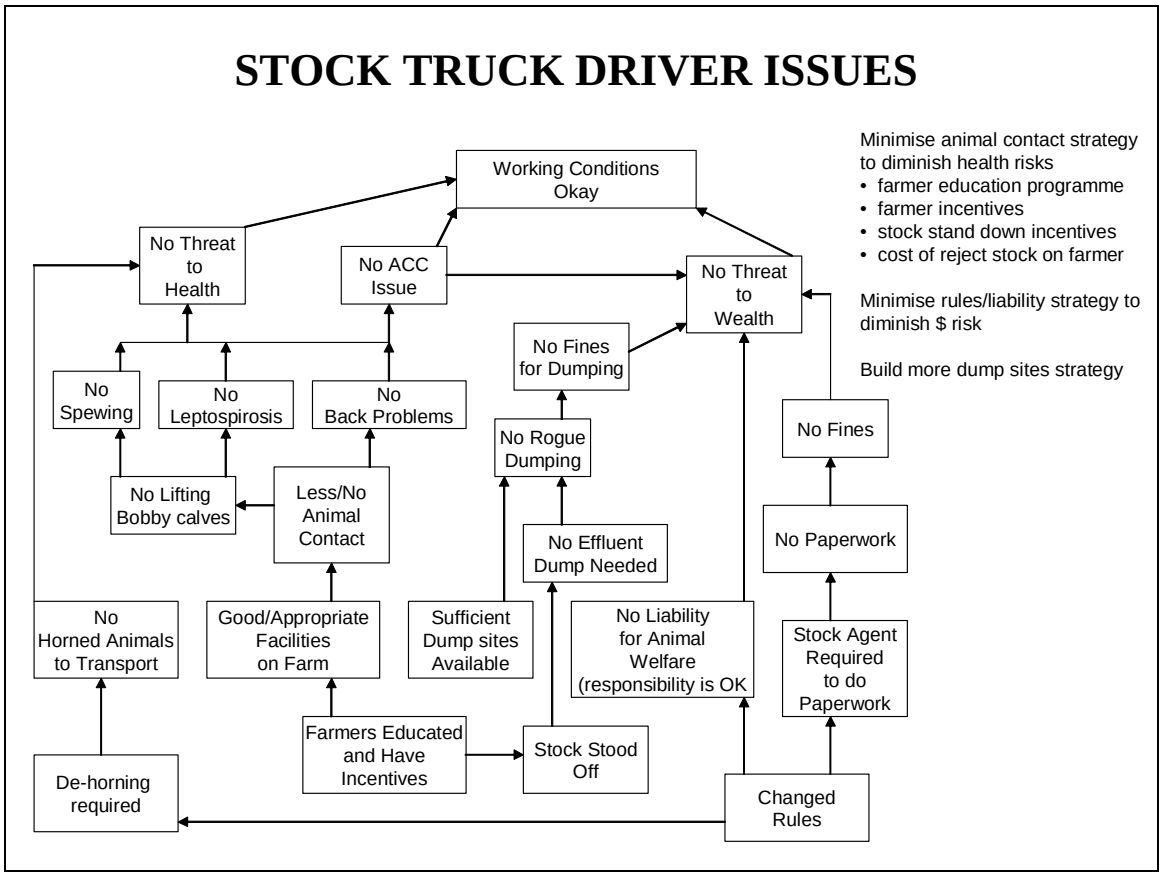


Figure E2 - Stock truck driver issues expressed as positive states

APPENDIX F- IN-DEPTH INTERVIEWS: DAIRY TANKER DRIVERS

The following is a summary of the comments made by the various people that were interviewed. The comments are largely quotes and consequently reflect differing views in the industry.

Recruitment

Dairy industry have expanded their cartage as they now have fewer plants and hence longer distances to cart the milk. Recruitment is no problem – a recent example given saw 800 applicants responding to an advertisement. Dairy industry drivers also roll trailers and break trucks, and so need top experienced drivers for tanker drivers driving on the farms.

Top job

Clean, good trucks, paperless, seasonal with paid vacation during the off season, all the gear supplied (boots, protective clothing, bags, etc.), shift work, monotonous runs. Well paid. 40 – 50 hour shifts only, and the drivers still get paid in the off season (two months off driving).

Roster and certainty

Milk tanker drivers get a roster for the full nine month season so they know what they'll be doing, compared with other industry sectors where drivers have little idea about where they are going to be tomorrow, and so can't plan for activities in the rest of their lives.

Other Issues

OSH and not being allowed to take family members for a ride in the truck cab. Relationship between drivers and other staff, runs and favouritism (some runs were considered better than others), and having your route changed on your run sheet.

APPENDIX G QUESTIONNAIRE USED FOR STRUCTURED RANDOM SURVEY OF EMPLOYMENT PATTERNS AND RECRUITMENT AND RETENTION ISSUES

Driver Recruitment /Retention Questionnaire

1. Operator's Name

2. Contact's Name **3. Tel. No**

4. Type of Business (please tick one or more)

Livestock	☐	Local Delivery	☐	Bulk dry goods	☐
Produce	☐	Logging	☐	Bulk liquids	☐
Line Haul	☐	Dairy	☐	General	☐
Other (please describe)					

5. Location of Business (Please tick one or more)

Region of NZ	Northern		Central NI	South NI	SI
Centre of Operations	☐	☐	☐	☐	☐
Spread of Operations	☐	☐	☐	☐	☐

6. Driver Employment

6a. Number of Drivers as employees **6b. Number of drivers as sub- contractors**

7. Turnover of Drivers

7a. Number of drivers who left your company in 2002? **7b. How did this compare to the year before?** increased ☐ same ☐ less ☐ (Please tick one)

8. Why do you think that these drivers left your company?

(Please either **estimate** or – if you know the actual reason - **give** the **number of drivers** who left for each of the following reasons. Please add **any other reasons** not identified below)

To go to another driving job		To improve working conditions		To get more regular working hours	
To go to another type of job		To increase wages		To retire	
To become a self employed driver		To reduce work related stress			
To reduce working hours		Because of home related pressures			

9. Current Vacancies

Number of drivers currently required **9a. As employees** **9b. As sub- contractors**

Please use further sheets if you would like to expand on any of the following answers:

10. Recruitment Process

10a. How do you recruit employee drivers? (Please describe) _____

_____

10b. How do your recruit sub-contractors? (Please describe) _____

_____

11.Future needs for Drivers (Please estimate your likely needs in the future – either as an increase or as a decrease)

Additional number likely to be needed	**In next year**		**In next 5 years**	
Size of any reduction in number of drivers needed	**In next year**		**In next 5 years**	

12. Key criteria you are looking for when engaging new drivers
For employees? (please list)

_____
_____
_____
_____

For owner drivers/sub contractors? (Please list)

_____
_____
_____
_____

13. Comments and suggestions regarding driver recruitment & retention
For example: is there a driver shortage? If so, what do you think the reason is for this? What action could be taken to improve the situation?

_____

_____

_____

APPENDIX H STATISTICS AND RESULTS OF QUANTITATIVE ANALYSIS OF THE SURVEY OF EMPLOYMENT PATTERNS; AND RECRUITMENT AND RETENTION ISSUES

Northland	11
Auckland	37
Waikato	18
Bay of Plenty	6
Gisborne	3
Hawkes Bay	6
Taranaki	8
Manawatu/Wanganui	8
Wellington	8
Tasman	1
Nelson	12
Marlborough	1
West Coast	2
Canterbury	25
Otago	13
Southland	9

Total for NI	105
Total for SI	63
TOTAL for NZ	168

Table H1 - Number of operators surveyed by location of HQ (by Region of HQ & by North & South Islands)

Throughout NZ	29
Throughout NI	38
Throughout SI	17
North of NI	25
Central NI	27
South NI	6
North SI	12
Central SI	15
South SI	13
TOTAL	182

Table H2 - Number of operators surveyed by area of operation

No. of employee drivers	0	1	2-5	6-10	11-50	51 +	Total
Northland	0	0	2	3	5	1	11
Auckland	3	2	7	5	15	5	37
Waikato	0	0	2	5	10	1	18
Bay of Plenty	0	0	0	1	5	0	6
Gisborne	0	0	2	1	0	0	3
Hawkes Bay	1	0	0	0	4	2	7
Taranaki	1	0	3	1	2	1	8
Manawatu/Wanganui	0	0	2	0	2	4	8
Wellington	0	1	2	2	3	0	8
Tasman	0	0	0	0	1	0	1
Nelson	0	0	2	0	5	1	8
Marlborough	0	0	0	0	1	0	1
West Coast	0	0	0	1	1	0	2
Canterbury	0	1	4	3	14	3	25
Otago	0	1	4	2	6	0	13
Southland	0	0	1	1	5	2	9
TOTAL	5	5	31	25	79	20	165

Table H3 - Size of operator surveyed as indicated by number of employee drivers (by location of HQ

No. of sub contractor drivers	0	1	2-5	6-10	11-50	51 +	Total
Northland	5	3	1	1	1	0	11
Auckland	19	2	5	7	3	1	37
Waikato	7	4	5	2	0	0	18
Bay of Plenty	5	0	0	0	0	0	5
Gisborne	2	0	0	1	0	0	3
Hawkes Bay	2	0	2	1	0	1	6
Taranaki	7	0	1	0	0	0	8
Manawatu/Wanganui	5	1	2	0	0	0	8
Wellington	4	1	1	1	0	0	7
Tasman	1	0	0	0	0	0	1
Nelson	9	1	0	0	0	0	10
Marlborough	1	0	0	0	0	0	1
West Coast	2	0	0	0	0	0	2
Canterbury	17	1	5	2	2	0	27
Otago	11	0	2	0	0	0	13
Southland	0	0	0	0	0	1	1
TOTAL	**97**	13	24	15	6	3	158

Table H4 - Size of operator surveyed as indicated by number of sub-contractor drivers used (by location of HQ)

Total number of drivers used	0	1	2-5	6-10	11-50	51 +	Total
Northland	5	3	3	4	6	1	22
Auckland	22	4	12	12	18	6	74
Waikato	7	4	7	7	10	1	36
Bay of Plenty	5	0	0	1	5	0	11
Gisborne	2	0	2	2	0	0	6
Hawkes Bay	3	0	2	1	4	3	13
Taranaki	8	0	4	1	2	1	16
Manawatu/Wanganui	5	1	4	0	2	4	16
Wellington	4	2	3	3	3	0	15
Tasman	1	0	0	0	1	0	2
Nelson	9	1	2	0	5	1	18
Marlborough	1	0	0	0	1	0	2
West Coast	2	0	0	1	1	0	4
Canterbury	17	2	9	5	16	3	52
Otago	11	1	6	2	6	0	26
Southland		0	1	1	5	3	10
TOTAL	**102**	18	55	40	85	23	323

Table H5 – Size of operator surveyed as indicated by total number of drivers by region

No of sub-contracted trucks	0	1	2-5	6-10	11-50	51 +	Total
Northland	6	2	0	2	1	0	11
Auckland	23	1	3	4	4	1	36
Waikato	8	3	4	3	0	0	18
Bay of Plenty	5	0	1	0	0	0	6
Gisborne	2	0	1	0	0	0	3
Hawkes Bay	3	0	1	1	0	1	6
Taranaki	7	0	0	1	0	0	8
Manawatu/Wanganui	6	0	1	0	1	0	8
Wellington	5	0	1	0	2	0	8
Tasman	1	0	0	0	0	0	1
Nelson	10	0	0	0	2	0	12
West Coast	2	0	0	0	0	0	2
Canterbury	20	0	2	0	0	0	22
Otago	11	0	2	0	0	0	13
Southland	0	1	0	0	0	0	1
TOTAL	110	8	16	11	10	2	156

Table H6 - Size of operator surveyed as indicated by total number of sub-contracted trucks (by location of HQ)

No of owned trucks	0	1	2-5	6-10	11-50	51 +	Total
Northland	0	0	3	2	5	1	11
Auckland	3	2	8	6	12	6	37
Waikato	0	0	1	7	9	1	18
Bay of Plenty	0	0	0	3	3	0	6
Gisborne	0	0	1	2	0	0	3
Hawkes Bay	1	0	0	0	4	1	6
Taranaki	1	1	4	0	2	1	9
Manawatu/Wanganui	0	0	2	1	4	1	8
Wellington	0	0	1	4	3	0	8
Tasman	0	0	0	0	0	1	1
Nelson	0	4	2	0	5	1	12
Marlborough	0	0	0	0	1	0	1
West Coast	0	0	0	1	1	0	2
Canterbury	1	1	1	7	12	3	25
Otago	0	1	4	0	8	0	13
Southland	0	0	1	1	5	2	9
TOTAL	6	9	28	34	74	18	169

Table H7 - Size of operator surveyed as indicated by total number of owned trucks (by location of HQ)

No of trucks operated	0	1	2-5	6-10	11-50	51 +	Total
Northland	6	2	3	4	6	1	22
Auckland	26	3	11	10	16	7	73
Waikato	8	3	5	10	9	1	36
Bay of Plenty	5	0	1	3	3	0	12
Gisborne	2	0	2	2	0	0	6
Hawkes Bay	4	0	1	1	4	2	12
Taranaki	8	1	4	1	2	1	17
Manawatu/Wanganui	6	0	3	1	5	1	16
Wellington	5	0	2	4	5	0	16
Tasman	1	0	0	0	0	1	2
Nelson	10	4	2	0	7	1	24
Marlborough	1	0	0	0	1	0	2
West Coast	2	0	0	1	1	0	4
Canterbury	21	1	3	7	12	3	47
Otago	11	1	6	0	8	0	26
Southland	0	1	1	1	5	2	10
TOTAL	116	16	44	45	84	20	325

Table H8 - Size of operator surveyed as indicated by total number of trucks operated (by location of HQ)