AT THE CROSSROADS:
THE NEW ZEALAND TRANSPORT AND LOGISTICS SECTOR

PREPARED BY ANZ CLIENT INSIGHTS
OCTOBER 2019

UDC

ANZ

CONTENTS

Introduction	03
A snapshot of the industry	04
Challenges facing the industry	08
Industry and government response	13
Towards more sustainable freight	15
Coordinating the supply chain	18
Appendices	22

FOREWORD

In 2015 ANZ's Transport Business Barometer paper provided a snapshot survey of the issues and opportunities facing the road transport industry. Our latest Transport and Logistics (T&L) report goes further to provide a more comprehensive and detailed insight into the key trends, performance and outlook for the sector.

The T&L sector is changing with supply chains increasingly required to be more coordinated, integrated and sustainable. While supported by a positive outlook, it must address important issues.

There are synergies for both T&L operators and end-users to work more closely together and simultaneously address capacity challenges, investment in sustainability and long term performance.

Whether you are a transport operator or not, we hope you find our latest report useful and we look forward to playing a part in building a strong and thriving T&L sector.

Andrew Sheed
General Manager, Auckland & Northland
Commercial & Agri, ANZ

The Transport and Logistics (T&L) sector is a key contributor to the New Zealand economy, with 91% of total freight being transported by truck. There is currently no expectation for this trend to change in the foreseeable future and as GDP grows, the demand for transport services is expected to increase accordingly.

There are a range of challenges facing the T&L sector, including an aging fleet in a time of increased focus on environmental sustainability from consumers and the Government.

However through smart investments in sustainability and a focus on long term performance, there are opportunities for building a competitive advantage and delivering long-term savings in operating costs.

Whether you are a large transport operator or an owner driver, we hope this T&L report will help deliver insights to help you plan for the future. We see the T&L sector as an important pillar of growth for New Zealand and look forward to helping businesses grow and thrive.

Morgan Strong
General Manager, Commercial
UDC Finance

KEY THEMES

The T&L sector plays a vital role in New Zealand's economy. It provides essential freight services to many industries, is a crucial link across supply chains and is key to our competitiveness as an exporting nation.

Despite its importance, the sector is facing challenges. Fragmentation of the industry, driver shortages and fierce competition are long standing and well understood issues, but new and intensifying challenges are also on the horizon.

The increasing demands for environmental sustainability, freight digitisation and evolving supply chains present both risks and opportunities that we think operators must both manage and leverage to stay ahead of the game.

We believe the T&L industry is at a crossroads whereby decisions will need to be made in addressing its key challenges. We see an opportunity for operators and end-users to move towards longer term relationships which focus on a more integrated supply chain approach.

In the interests of all stakeholders, this will ensure New Zealand continues to benefit from reliable, high-quality transport and logistics services that meet the requirements of customers, regulations and environmental sustainability.

ABOUT THIS REPORT

The purpose of this report is to help T&L operators and end-users understand and plan for developments that affect their business by analysing industry risks and identifying opportunities.

For this report we constructed a sample of 170 T&L businesses which allowed us to analyse financial performance by size, segment, region and operating and business models.

The T&L sector plays a central role in the performance of the New Zealand economy. What happens in this sector has implications for New Zealand's import, export and domestic supply chains. This report provides an understanding of the importance of the T&L sector, how we see it evolving and the potential impact on transport businesses and end-users.

This report is prepared for information only and you should get your own advice for your needs. Unless we say otherwise, the information and our views are based on our analysis of the data extracted from the sample. Please also refer to the disclaimer at the back of this report.

REPORT STRUCTURE

1. **Introduction**
   Overview of the T&L sector and its importance to the New Zealand economy.
2. **A snapshot of the industry**
   Analysis of the sector's performance and outlook.
3. **Challenges facing the industry**
   Driver shortages, capacity constraints, low productivity growth and sustainability.
4. **Industry and government response**
   Initiatives to address key challenges from operators and the Government.
5. **Towards more sustainable freight**
   Pathways to sustainability, whole of supply chain approach and Government initiatives.
6. **Coordinating the supply chain**
   Implications, risks and opportunities for both operators and end-users.
7. **Appendices**
   T&L operator sample composition, road freight activity, heavy vehicle licence and truck fleet growth.

Sample confidentiality and minimum size
Median analysis – Minimum of 8 customers when median financial performance is shown
Quartile analysis – Minimum of 12 whereby median, upper and lower quartiles are shown

INTRODUCTION

Transport and logistics – key to our economy and competitiveness

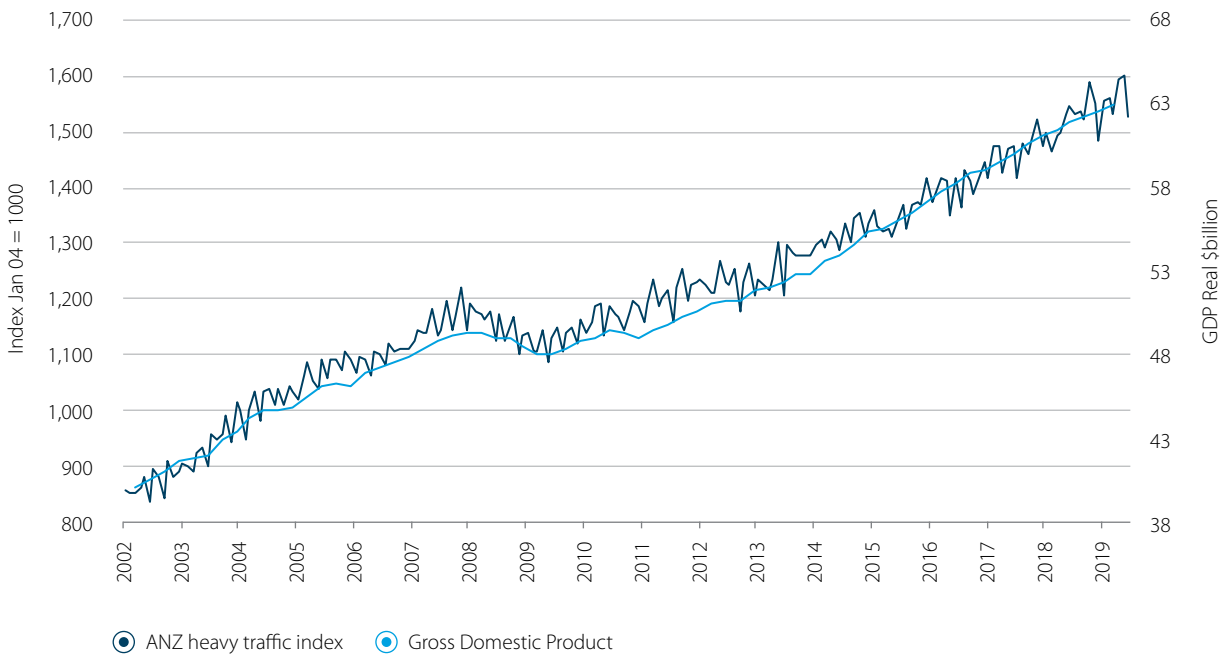
The importance of the T&L sector is best exemplified by the close correlation between freight activity and economic growth, so much so that ANZ economics developed a 'Truckometer' that uses heavy vehicle traffic activity data as a lead indicator of Gross Domestic Product (GDP) growth (chart below).

The total New Zealand T&L market (road, logistics, rail, coastal shipping and air) is estimated at $24b, accounting for 94,000 jobs and contributing $12b to New Zealand's national income (4.7% of GDP in 2019). The road freight market is estimated at $6b and accounts for a third of T&L jobs (30,400)[1] [2].

Manufacturing businesses spend $3.3b on T&L services annually, while wholesale trade spend $1.6b, agriculture $1b and retail $665m[3]. With a diverse range of industries supported by the T&L sector spending typically varies from 5% to 15% of total expenses by industry, although sectors like forestry and logging spend up to 20%[3].

ANZ Truckometer: Heavy Traffic and Gross Domestic Product (GDP)

Source: ANZ Economics



(1) Statistics New Zealand, Gross Domestic Product, 2019
(2) Statistics New Zealand, Business Demographics, 2019
(3) Statistics New Zealand, Input-Output tables, 2016

A SNAPSHOT OF THE INDUSTRY

THE T&L SECTOR HAS BEEN A RESILIENT PERFORMER

For this report, ANZ undertook financial performance analysis of 170 T&L businesses from 2013 to 2018 covering operators of different size, segments, regions, operating and business models.

T&L sales revenue has grown consistently over the past six years despite a period of moderation in 2015-16. Freight rates have started rising again in part due to the increase in fuel prices[4].

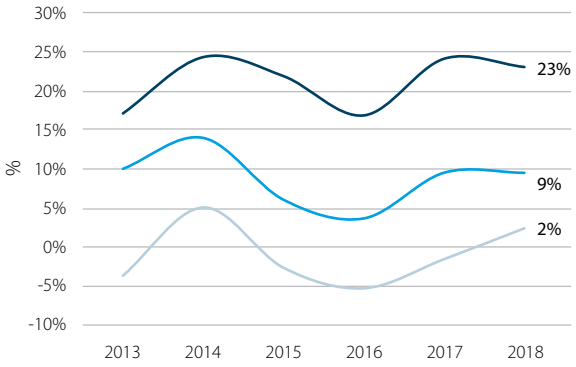
Wage costs as a proportion of revenue have been steadily increasing, particularly over 2015 and 2016 where sales growth slowed.

EBIT margins have been relatively stable but the gap between the most and least profitable operators has widened since 2013.

Return on assets has also been relatively stable but with a wide variation as half of operators exhibited returns between 2% and 10% in 2018.

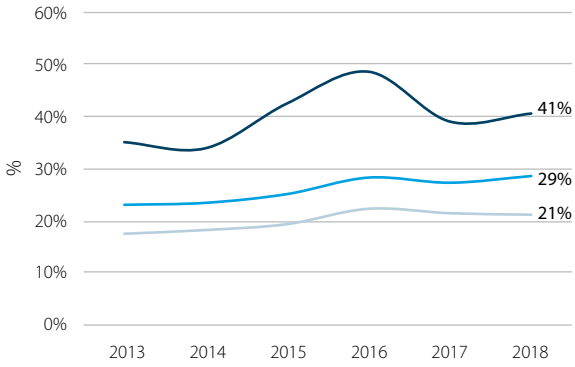
Sales revenue growth

Source: ANZ Analysis



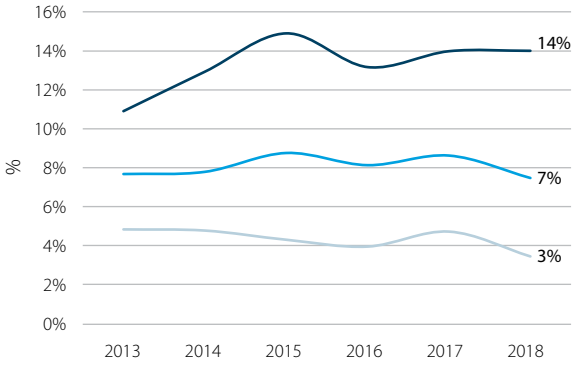
Wages to sales revenue

Source: ANZ Analysis



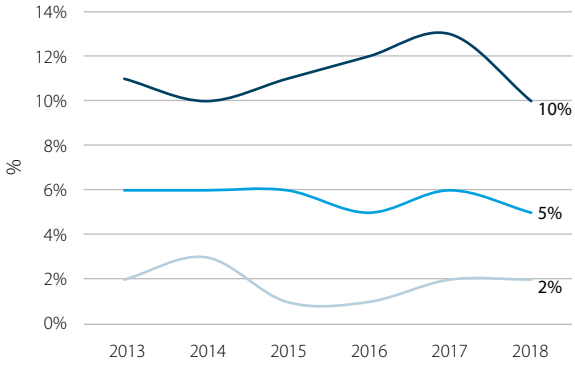
EBIT margin

Source: ANZ Analysis



Return on assets

Source: ANZ Analysis



Upper quartile Median Lower quartile

(4) Appendix 2

REGIONAL PERFORMANCE DIFFERS ACCORDING TO FREIGHT DEMAND, INFRASTRUCTURE, LABOUR AVAILABILITY AND OTHER INPUT COSTS

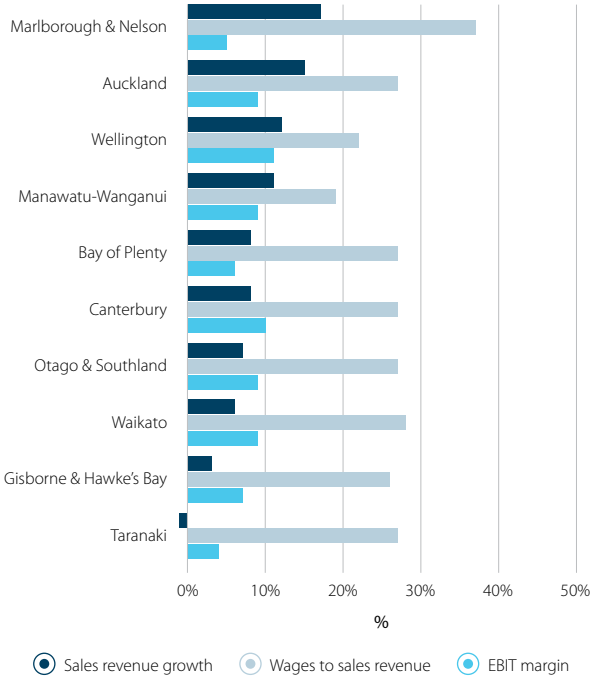
Two-thirds of businesses in our sample were based in the North Island, with a significant proportion in Auckland and Waikato. Auckland and Wellington were amongst the fastest growing regions in our sample, with Wellington exhibiting higher EBIT margins.

Sales have been particularly strong in Auckland driven by economic and population growth, elevated construction activity and Auckland's role as a logistics hub. Export sectors supported freight activity in the Marlborough & Nelson regions while Taranaki exhibited the lowest margins and sales growth over the last six years.

The Marlborough & Nelson regions, which have older driver workforces, had the highest wage costs as a proportion of revenue. Conversely, Wellington and Manawatu-Wanganui have relatively younger driver workforces and showed lower wage costs[5].

T&L regional performance

Source: ANZ Analysis



Operator results averaged for 2013-2018
Regional results shows the median of all operators, ranked by sales revenue growth

(5) Appendix 3

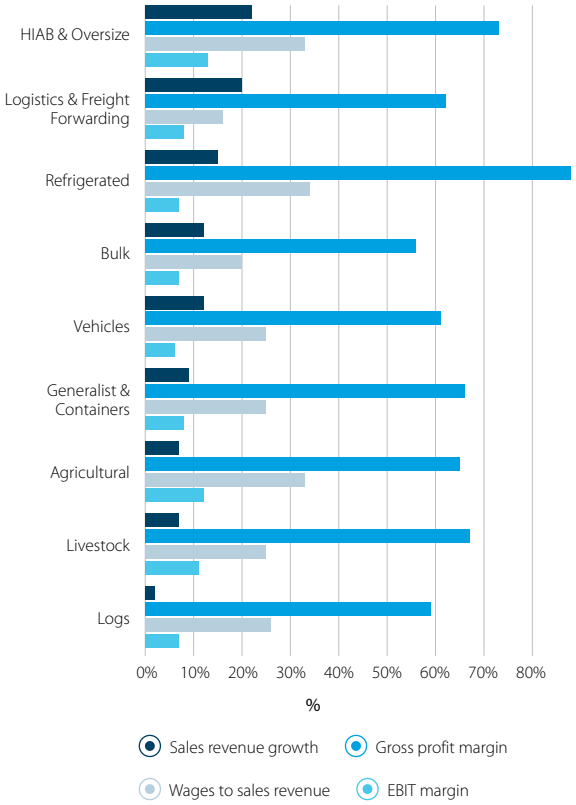
HIAB & OVERSIZE, LOGISTICS & FREIGHT FORWARDING AND REFRIGERATION OUTPERFORMED ON SALES GROWTH

The HIAB (e.g. truck with loader cranes) & Oversize segment experienced the highest sales growth over the last six years, in part driven by strong construction activity. It also exhibited strong margins and is one of the most fragmented segments which could introduce consolidation activity going forward.

Logistics & Freight Forwarding and Refrigerated also experienced strong sales growth with end-users increasingly seeking complete logistics propositions. Other segments grew on average between 9% and 15% annually, with the Agricultural, Livestock and Log segments experiencing higher sales volatility over the period.

T&L freight segment financial performance

Source: ANZ Analysis



Operator results averaged for 2013-2018
Segment results shows the median of all operators, ranked by sales revenue growth
Gross Profit Margin is before wages are deducted
Appendix 4 summarises the composition of our sample by freight segment

THERE WAS LITTLE DIFFERENCE IN FINANCIAL PERFORMANCE BETWEEN OWNER-DRIVER AND OTHER OPERATORS

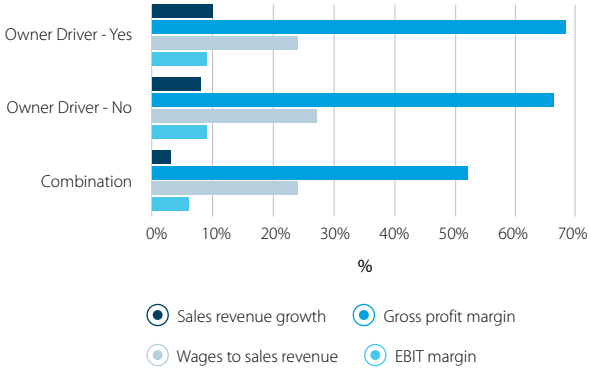
The road transport industry experiences cycles over which the number of owner-driver operator fluctuates. In our sample 27% of businesses were solely owner-driver operators.

Over the past six years, we found that the type of operation (whether the operator is an owner-driver or not) had no substantial bearing on financial performance, with gross profit and EBIT margins relatively similar between owner-driver and other operators.

Interestingly, operators using a 'combination' of these models (i.e. owning vehicles and employing drivers while also contracting freight to other carriers) showed poorer performance. However, we note that this sample was smaller and performance could have been more reflective of the operators' segment and business model.

Financial performance by type of operator

Source: ANZ Analysis



Operator results averaged for 2013-2018
Gross Profit Margin is before wages are deducted
Type of operator results shows the median of all operators, ranked by sales revenue growth

THE OUTLOOK IS POSITIVE...

The future outlook for the T&L sector is positive. The chart below summarises the projected freight growth to 2042 in tonnage by main products[6]. The projections show that:

- Construction related flows (e.g. limestone, cement, concrete and aggregate) are expected to account for half of the increase in freight by weight over the next 30 years, from both investment in housing and infrastructure.
- Primary sector products (e.g. dairy, forestry, meat, horticulture) are expected to account for a quarter of the increase, but aren't projected to grow at the same pace (forestry +28%, slower than horticulture +65%).
- General freight (manufacturing and retail), energy (largely petroleum), waste and other flows (e.g. imported vehicles) are expected to account for another quarter.
- Courier volumes, while small in weight, are projected to more than double driven by the demand from e-commerce and online-shopping.

Road transport is projected to account for 91% of all freight in 20 years, with rail and coastal shipping accounting for 7% and 2% of total freight respectively[6].

... BUT COMPETITION REMAINS FIERCE

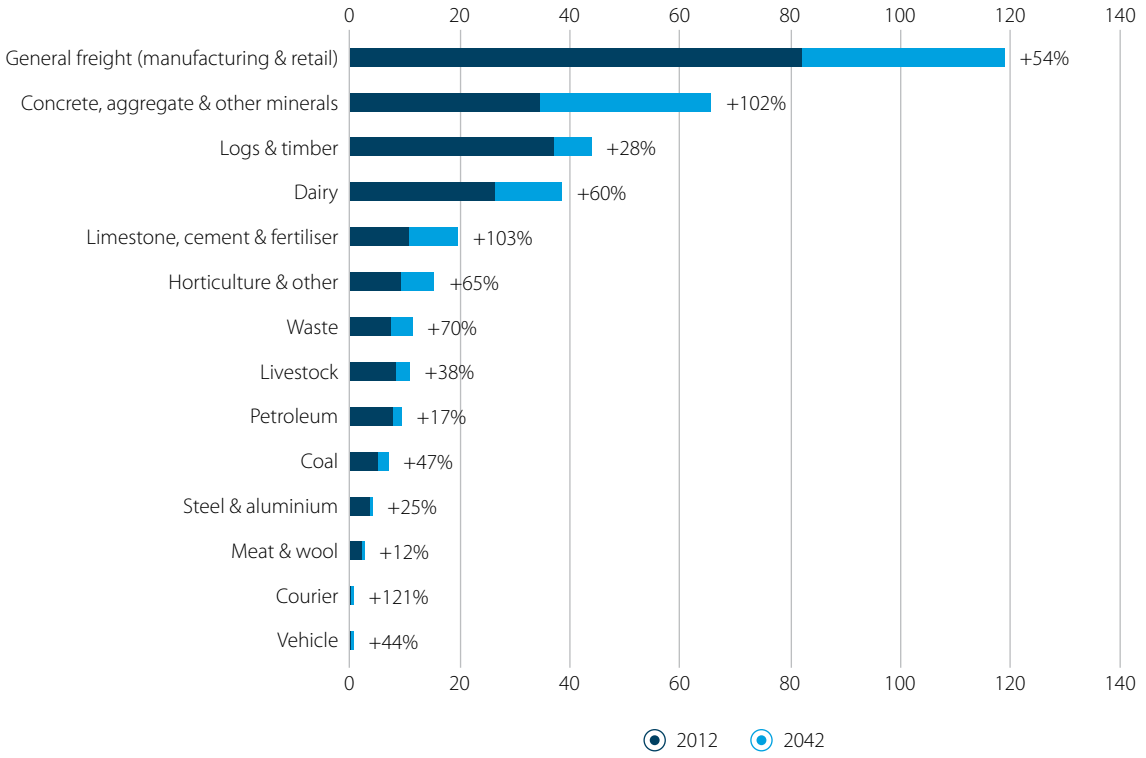
While these facts point toward a positive backdrop, competition across the sector continues to be fierce and operators face margin pressure been driven by rising wages, fuel and other costs.

The viability of the status quo may come into question as economic growth puts pressure on demand, labour shortages endure and sustainability requirements constrain the sector's ability to expand through adequate returns.

Over the long run this could be detrimental to both carriers and end-users if the quality of transport services suffers. The next section details some of these challenges in more detail.

Freight growth forecast 2012 – 2042 (in million tonnes)

Source: ANZ Analysis; National Demand Freight Study



(6) Ministry of Transport, National Freight Demand Study, 2014; Measured by weight in tonnes

CHALLENGES FACING THE INDUSTRY

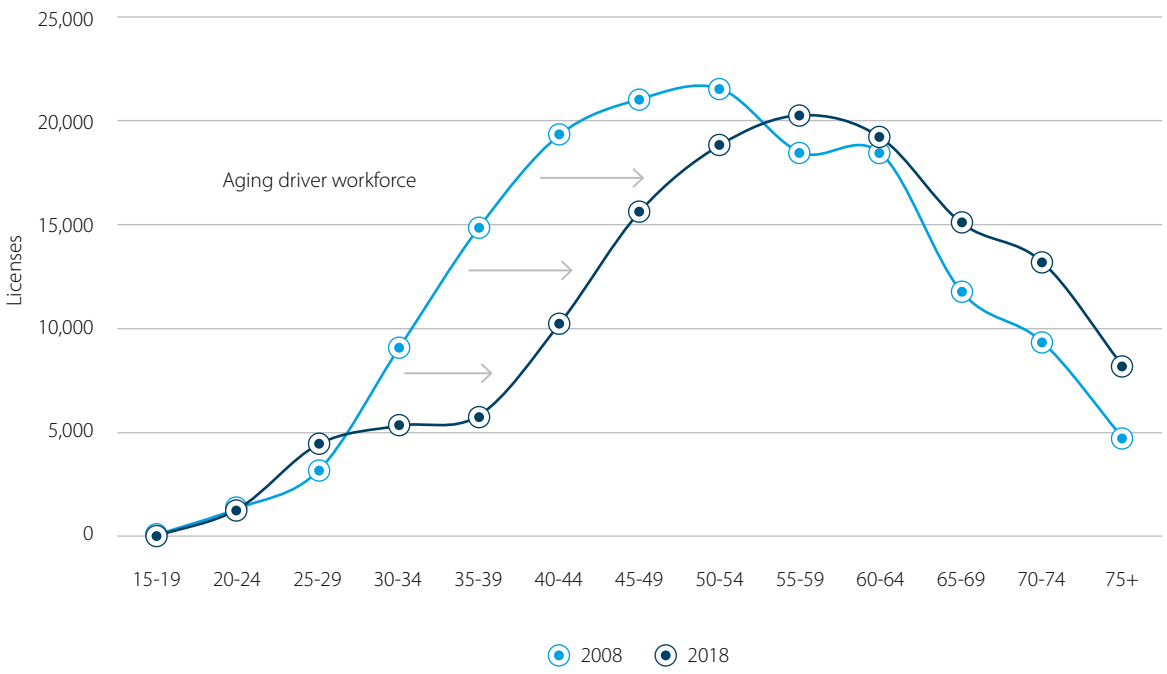
DRIVER SHORTAGES

Attracting and retaining skilled drivers remains the main capacity challenge for the road transport sector. The New Zealand heavy truck driver workforce is between 22,000 and 25,000[7]. The Road Transport Forum estimates that road transport is currently short of 4,000 heavy vehicle drivers[8].

The average driver age has risen to 54 as drivers work later in their careers (chart below)[7]. Encouragingly, the industry has seen a 10% rise in issuance of class five licenses in 2018[9] [10]. A positive trend is the increase in class five licences from drivers aged between 20 and 30 years old and while not enough to make up for the overall loss of drivers in the industry, this is an opportunity to leverage and address labour shortages.

Number of class five licences by age in 2008 and 2018

Source: ANZ Analysis; New Zealand Transport Agency



(7) Jared Abbott and Mikee Santos, In for the Long-Haul: what is behind the truck-driver shortage in Aotearoa New Zealand?, May 2019
(8) https://nztrucking.co.nz/rtf-welcomes-driver-training-investment
(9) https://alliedpublications.co.nz/blogs/news/driver-shortage-being-addressed-says-nrc
(10) Class five licences allows driving heavy combination truck with a gross combined weight of more than 25,000kg.

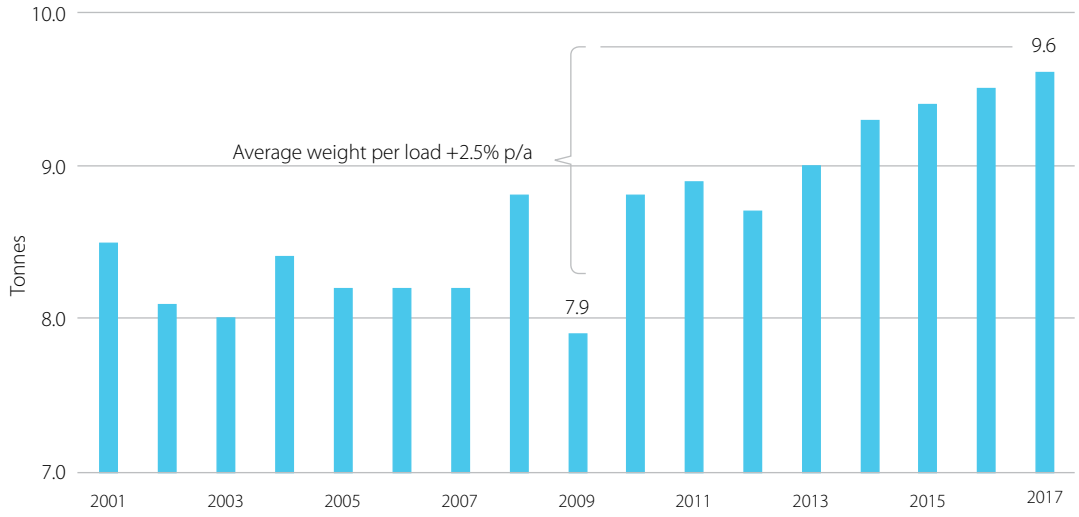
SLOW PRODUCTIVITY GROWTH

New Zealand's geography remains a challenge for T&L productivity. The average loads per vehicle remained relatively constant up to 2010, after which it began rising largely thanks to the introduction of High Productivity Motor Vehicles. The average annual distance travelled per operator for the industry has also risen (chart below and Appendix 1)[11].

Urban congestion has also had a strong impact on T&L productivity. Congestion has significantly worsened over the past five years and has increased travel times as well as reduced network reliability. The Auckland network was 33% more congested in 2018 during the morning peak hour compared to 2014 which remains a persistent issue for the industry[12].

Average load of heavy road vehicles (tonnes)

Source: ANZ Analysis; Ministry of Transport



(11) Ministry of Transport, Transport Dashboard and Indicators, 2019
(12) Ministry of Transport, The Congestion Question, 2019

AN AGEING FLEET

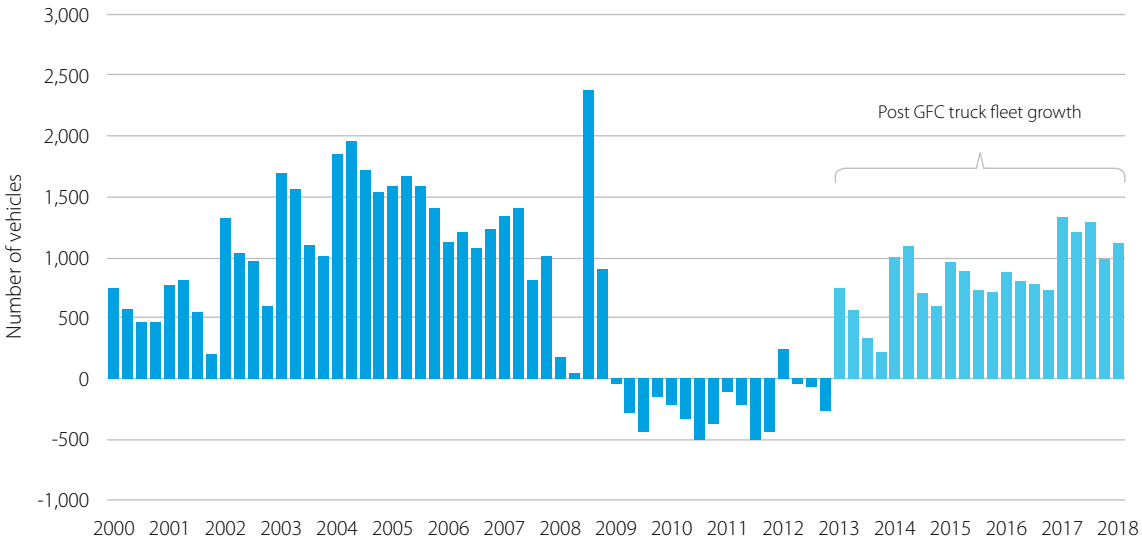
Cost pressures, along with other factors, are leading operators to hold on to their trucks for longer. The average age at which trucks leave the fleet has increased from 20 to 24 years since 2001[13].

The truck fleet has been growing for the last five years after a period of low registrations between 2009 and 2013 following the global financial crisis and the introduction of emission standards. The increase has largely been from new vehicles whereas historically the balance between used and new imports was more even[13].

The truck fleet average age is about 17 years which is relatively old internationally and has been rising[14]. A significant proportion of the current fleet was manufactured between the mid-1980s and the early 2000s of which between 3% to 5% has been scrapped each year[15].

Truck fleet growth

Source: ANZ Analysis; Ministry of Transport; Quarterly



(13) Appendix 5
(14) http://www.ehinz.ac.nz/assets/Factsheets/Released-2017/EHI10-11-AverageAgeOfVehicleFleetInNZ2000-2015-release-201701.pdf
(15) Ministry of Transport, 2017 New Zealand Vehicle Fleet Annual Statistics; That being said older trucks tend to be smaller and are less likely to be used for long distance travel, the majority of which being undertaken by larger, recently imported new vehicles.

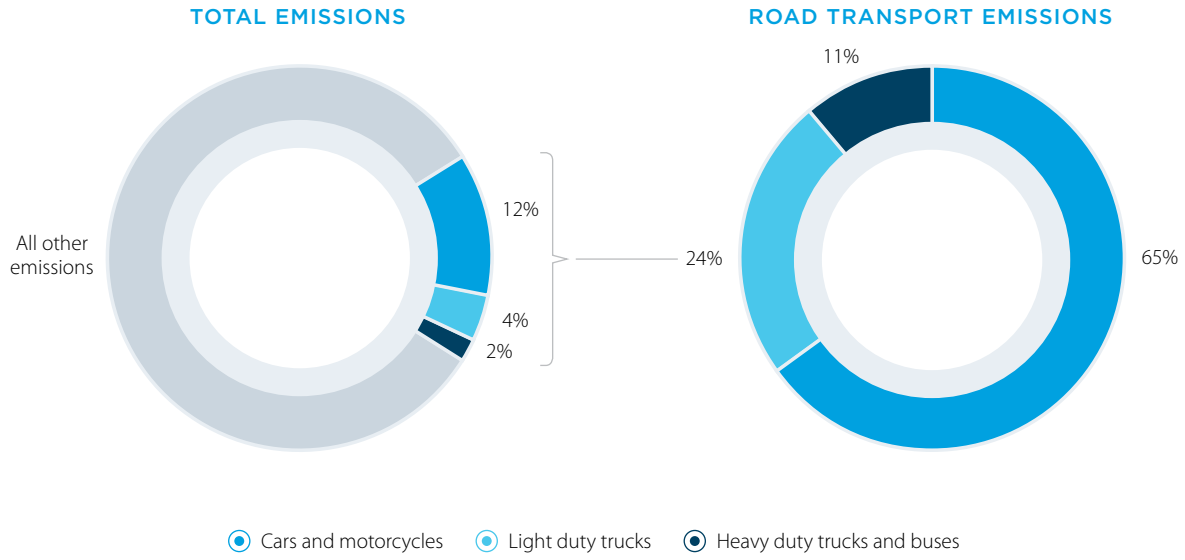
GROWING PRESSURE TO BECOME MORE SUSTAINABLE

With government and consumers increasingly concerned with environmental sustainability, transport plays an important role in the contribution of supply chains to New Zealand's carbon emissions.

T&L makes up 19.7% of total emissions, with road transport accounting for the majority at 18%[16]. Light and heavy duty trucks account respectively for 4% and 2% of New Zealand's total emissions. In general, rail and coastal shipping are less emissions-intensive modes of freight transport compared to road[16].

Composition of emissions from road transport[17]

Source: Ministry for the Environment, kt CO_2-e, 2017



(16) New Zealand Productivity Commission, Low-Emissions Economy, 2018
(17) Ministry for the Environment, New Zealand's Interactive Emissions Tracker, 2019

INDUSTRY AND GOVERNMENT RESPONSE

GROWING DEMAND, LABOUR SHORTAGES, CHALLENGING PROFITABILITY AND THE TRANSITION TO SUSTAINABILITY POINT TOWARDS CONSOLIDATION

With the T&L sector tracking GDP growth there are limitations in achieving scale organically. The industry remains fragmented with the majority of carriers having fewer than five trucks and employees[18] [19].

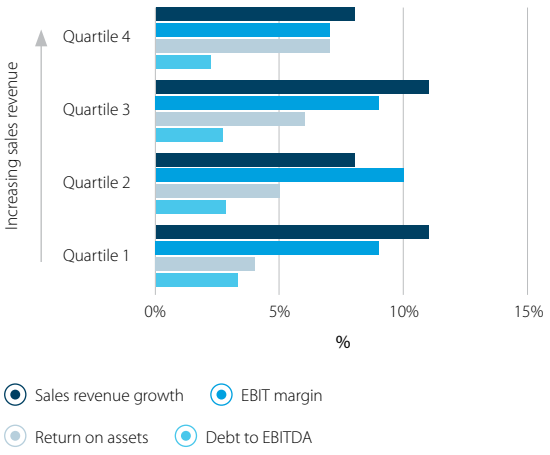
Hence a number of transport businesses opt to grow through acquisition to achieve scale and cost efficiencies. While acquisitions can lift performance through improved service offering and greater bargaining power, they do come with challenges. Joint ventures are another avenue to consolidation.

Over the past 10 years, the number of road freight businesses fell from 5,500 to below 5,000. At the same time the average number of employees rose from 4.8 to 6.1 per operator[20].

Average sales growth was similar for all companies regardless of size but return on assets improved with scale, suggesting a link between size and asset utilisation. Larger operators tended to be also less leveraged (lower debt to EBITDA ratio) which potentially provides more capacity to expand through acquisitions.

Financial performance by size

Source: ANZ Analysis



Operator results averaged for 2013-2018
Sales quartile results show the median of all operators, ranked by sales revenue

INCREASING CAPACITY

Addressing labour shortages

Both the industry and the Government are taking steps towards increasing capacity by addressing labour shortages and investing in road, rail and coastal shipping infrastructure.

Operators have a range of initiatives available when recruiting and retaining drivers, including:

- providing career paths to existing drivers recognising different driving skills, including retaining simpler rigs for younger drivers to gain experience on.
- better communicating new regulations to reduce inadvertent breaches as well as avoid drivers having to haul illegal loads.
- improving truck maintenance to avoid drivers having to use badly maintained vehicles.
- improving employment conditions, remuneration and management culture[21].

The Government has committed $2.8m to train 700 commercial drivers a year[22]. Amending the immigration system for truck drivers has also been raised as a possibility to grow the driver workforce[23]. In addition the industry is actively encouraging diversity by supporting the increase in female and young drivers[24].

Rail and coastal shipping investment

The Government is investing $1b in rail consisting of $741m towards maintaining rail capacity and $300m towards regional rail projects[25]. Rail sometimes competes but more often complements road freight, which provides the last mile. Rail is best suited for bulky, heavy products and long distance freight to and from industrial plants, mines and ports. It is estimated that 21% of all New Zealand freight is contestable by rail[26].

Rail has sustainability benefits, generating 66% fewer carbon emissions than freight moved by truck, aligning with the government's objectives to reduce emissions from transport[27].

The Government has also signalled its willingness to invest in coastal shipping infrastructure, especially following the Kaikoura earthquake[28]. Where possible, rail was substituted for coastal shipping for freight going into Christchurch. The resilience of the transport system is key to preventing future supply chain interruption, in particular following natural disasters.

(18) Statistics New Zealand, Annual Enterprise Survey, 2014
(19) ANZ, Barometer, Transport Insights 2015
(20) Appendix 6
(21) TERNZ Limited, Driver recruitment/retention in heavy truck transport industry, http://www.ternz.co.nz/Publications/Driver%20Recruitment%20Retention%20in%20the%20Heavy%20Truck%20Transport%20Industry%20%28Full%20Report%29.pdf
(22) https://transporttalk.co.nz/news/government-fund-2-8m-commercial-driver-training
(23) https://www.interest.co.nz/opinion/87452/case-truck-drivers-highlights-how-confusing-nzs-work-visa-and-immigration-settings-can
(24) https://nztrucking.co.nz/better-business-women-at-the-wheel
(25) https://www.kiwirail.co.nz/news/561/78/Budget-investment-builds-a-solid-foundation-for-rail.html.
(26) New Zealand Productivity Commission, International Freight Transport Services, 2012
(27) https://www.kiwirail.co.nz/news/544/128/Electric-locomotives-to-continue-with-Government-investment.html
(28) https://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=12243566

INNOVATION IS THE KEY TO LIFTING PRODUCTIVITY GROWTH

Opportunities to improve productivity across T&L business models can occur through obtaining new skillsets, creating operational efficiencies and investing in new technology.

One of the longer term productivity growth opportunities is 'platooning', where sensor-linked trucks move in convoy to reduce variations in speed and hence travel time (with fuel savings estimated between 10% and 17%)[29]. Another is autonomous heavy vehicles which could reduce operating costs by 25% to 40%, fuel consumption by 10% and delivery times by 30% to 40%[30].

However, New Zealand's road infrastructure and highways make implementing autonomous vehicles and platooning technologies challenging and further improvements will be required before these can be deployed[31].

Tackling congestion is another major productivity growth opportunity. The Government and Auckland Council are investigating whether or not to introduce congestion pricing in Auckland. Congestion pricing charges road users at different times or locations to encourage users to change the time, route or way in which they travel[32].

A WIDE-RANGING APPROACH IS REQUIRED TO TRANSITION TO A MORE ENVIRONMENTALLY SUSTAINABLE INDUSTRY

Operational efficiencies (i.e. generating the same output with less inputs) can also help solve for more environmentally sustainable outcomes.

This is one of the industry's big challenges and is an area of particular focus for both the sector itself and the Government.

There is no silver bullet in reducing transport emissions as delivering these outcomes needs to also be technically feasible and commercially viable. With this in mind, it is likely that we will see a range of approaches as businesses take incremental steps towards achieving this goal.

In the next section, we focus on existing and potential approaches to improving environmental sustainability.

(29) https://www.nrel.gov/transportation/fleettest-platooning.html
(30) https://www.mckinsey.com/industries/travel-transport-and-logistics/our-insights/the-us-truckload-industry-seeks-a-road-to-the-future
(31) Ministry of Transport, Auckland Transport Alignment Project, Freight Report, 2018
(32) Ministry of Transport, The Congestion Question, 2019

TOWARDS MORE SUSTAINABLE FREIGHT

THERE ARE MULTIPLE PATHS TOWARD MORE SUSTAINABLE ROAD FREIGHT

We see the transition towards sustainability including a combination of electrification, substituting fossil fuels with liquid biofuels or biogas and adopting hydrogen fuel-celled vehicles (HFVs).

There are currently about 140 heavy electric vehicles (EV) in the New Zealand vehicle fleet[33]. A number of technological challenges will need to be overcome for wider heavy EV uptake including battery weight and travel range, both of which make electrifying heavy vehicles less practical and economic than light vehicles[34].

The electrification of urban freight including lighter commercial vehicles is expected to be swifter than heavy duty long-haul freight, for which HFVs are more suited in the medium term[34]. While there are emissions involved with producing biofuels and hydrogen, they nonetheless provide a net reduction in emissions of around 5% depending on the technology used[34].

SUSTAINABILITY IS BEST ACHIEVED BY TAKING A WHOLE OF SUPPLY CHAIN APPROACH

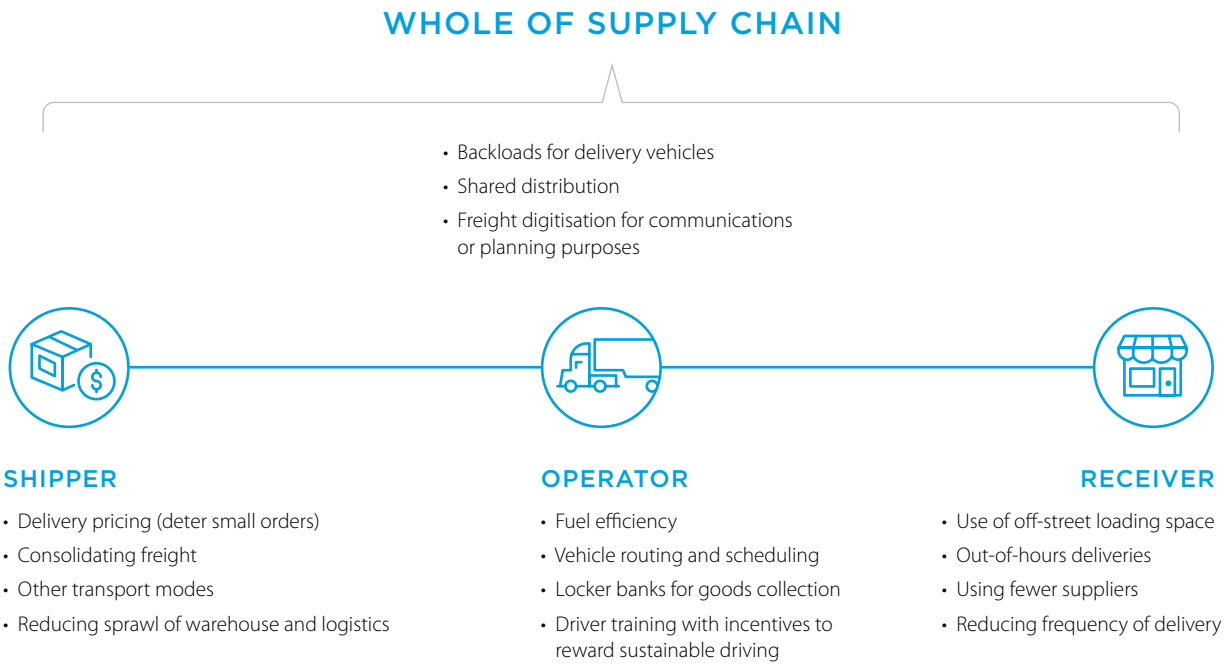
Collaborative supply chains are important for unlocking improvements in environmental sustainability.

The transition to better environmental sustainability will be facilitated by coordinated initiatives, emphasising the need to move away from transactional and towards longer term relationships.

The figure below summarises some opportunities for shippers, carriers and receivers to work more closely and leverage their respective sustainability initiatives.

Whole of supply chain sustainability initiatives[35]

Source: Transport and Communications Bulletin for Asia and the Pacific



(33) Ministry of Transport, Transport Dashboard, https://www.transport.govt.nz/mot-resources/transport-dashboard/2-road-transport/rd085-electric-vehicle-fleet-size/
(34) New Zealand Productivity Commission, Low-Emissions Economy, 2018
(35) https://www.unescap.org/sites/default/files/bulletin80_Article-1.pdf

IMPROVING PRODUCTIVITY CAN YIELD SUSTAINABILITY BENEFITS

Operators already have financial incentives to be fuel efficient. However, freight operators can also reduce their environmental footprint through improvements in internal and external operations, including better utilisation of heavy vehicle fleets, driver training and better supply chain collaboration (figure below).

Frequent data collection across the T&L sector will also help to measure progress towards sustainability objectives, including fuel burn rates (litres/km or litres/tonne), intensity (tonne/km or tonne/m3), modal split (road, rail, ship, air) and emissions conversion (kg CO2e/tonne/km)[36].

Potential energy savings from sustainable initiatives[37]

Source: International Energy Agency, 2018

Energy Savings	Innovation	
5%-10%	Route optimisation – intra city	Operator initiatives
1%	Route optimisation – long haul	Operator initiatives
0%-20%	High capacity vehicles	Operator initiatives
3%-10%	Driver training and feedback	Operator initiatives
5%-10%	Last mile delivery optimization (depending on degree of implementation)	Operator initiatives
0%-15%	Supply chain collaboration and co-loading	Supply chain collaboration
5%-10%	Matching cargo and vehicles (freight exchanges, digital freight matching, crowd shipping and co-modality)	Supply chain collaboration
20%-50%	Urban consolidation centres	Supply chain collaboration

- Operator initiatives
- Supply chain collaboration

(36) https://www.sbc.org.nz/__data/assets/pdf_file/0011/119783/Sustainable-procurement-guidelines-for-freight.pdf
(37) International Energy Agency, The Future of Trucks, 2018, https://www.itf-oecd.org/sites/default/files/docs/future-trucks-cazzola.pdf

THE GOVERNMENT IS LIKELY TO PURSUE A MIX OF POLICIES TO SUPPORT THE TRANSITION

The Emissions Trading Scheme, which aims to incentivise reducing emissions, currently plays a limited role as the carbon price is a small component of fuel prices. Hence, additional measures will be needed for the sector to achieve its transition to sustainability[38].

Heavy EVs are currently exempt from Road User Charges which does provide an uptake incentive[39]. While a feebate scheme might be implemented for light vehicles (where importers would either pay a fee or receive a rebate depending on the vehicle's emissions efficiency) it is less likely for heavier vehicles as they vary significantly in their capability and performance[38].

The Government's Low Emission Vehicles Contestable Fund, administered by the Energy Efficiency and Conservation Authority, offers up to $7 million a year to co-fund projects and accelerate the uptake of electric and other low emissions vehicles[40].

The Government has also invested in a charging infrastructure network with approximately 90% of New Zealand's highways within 75km of a fast charger[38].

TO MEET ITS FUNDAMENTAL CHALLENGES THE INDUSTRY WILL NEED TO EVOLVE INTO A MORE COORDINATED MODEL

The T&L sector is undertaking a range of initiatives to tackle these challenges and the way of doing business between carriers and end-users is poised to move towards a more collaborative model.

This approach would involve, amongst other changes and depending on the size and segment of operators, closer working relationships as well as more formal longer term contracts which balance the expectation of service quality with freight rates.

In the next section, we explore what this could look like for the industry and its stakeholders across the supply chain.

(38) New Zealand Productivity Commission, Low-Emissions Economy, 2018
(39) Ministry of Transport, Electric Vehicles, 2019, https://www.transport.govt.nz/multi-modal/climatechange/electric-vehicles/
(40) Energy Efficiency and Conservation Authority, 2019, https://www.eeca.govt.nz/funding-and-support/low-emission-vehicles-contestable-fund/

COORDINATING THE SUPPLY CHAIN

THE OPPORTUNITY FOR GREATER INTEGRATION

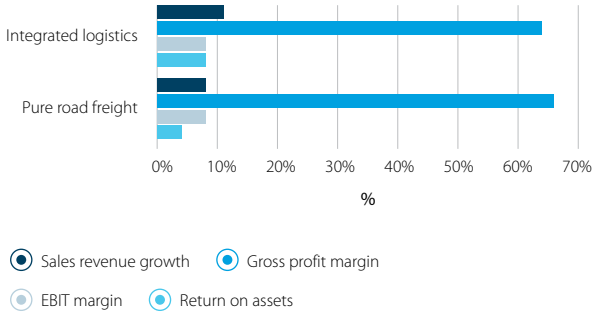
Third and fourth party logistics (3PL and 4PL) services, which organise the warehousing and distribution of end-user products, are fast growing segments of the sector.

Our analysis showed that these integrated operators exhibited better financial performance, including superior sales growth and higher returns on assets, which is likely a result of end-users seeking more bespoke and efficient solutions. At the same time, tighter regulations have led to higher transporting, storing and delivering standards which are more cost-effectively met by specialist integrated operators.

Logistics services are also attractive to smaller shippers, that seek to share the cost of warehousing and consolidate volumes. Freight digitisation and e-commerce are also increasing the need for better integrated services in order to cope with shorter production runs and just-in-time delivery.

Financial performance by business model

Source: ANZ Analysis



Operator results averaged for 2013-2018
Gross Profit Margin is before wages are deducted
Business model results shows the median of all operators

SUPPLY CHAINS ARE BECOMING MORE COORDINATED, WHICH PROVIDES BOTH RISKS AND OPPORTUNITIES

The road freight sector must adapt to changes taking place along the supply chain. The integration of export and import supply chains is likely to continue, driven by the investment in rail infrastructure, consolidation of shipping lines and digitisation of freight.

Greater coordination across modes (road, rail, ports and shipping) through information sharing and freight digitisation will, we think, require operators to better integrate into supply chains, particularly for urban freight.

The move to larger ships means that port freight movements may become more tidal. This will require more trucks while larger vessels are in port to ensure service reliability, followed by a lull over period whereby carriers will need to maintain utilisation[41].

The Government's Upper North Island Supply Chain working group is reviewing the structure of supply chains[42]. It is tasked to investigate whether competition between ports and inland logistics is leading to capital investment duplication. This includes reviewing what types of more cooperative models may be viable.

Freight is becoming more digitised

Many operators are investing in digital capability to enhance the value proposition to end-users:

- While not taking place at the same rate across segments, operators are aiming to improve efficiency and transparency through better vehicle scheduling and cargo monitoring for end-users.
- Other benefits from freight digitisation are a more responsive service, automated pre-sales, fewer manual processes and safer driving. It can also provide better price discipline, generate more leads and higher win rates, all of which impact profitability and enhance carriers' value proposition.
- Technological disruptors and start-ups are also entering the market, covering a range of innovative solutions such as autonomous logistics, digital platforms and big data analytics. The market for intelligent transport systems in New Zealand over the next 30 years is estimated at $1.5b annual turnover[43].

(41) https://www.natroad.co.nz/Story?Action=View&Story_id=2245
(42) https://www.transport.govt.nz/multi-modal/keystrategiesandplans/upper-north-island-supply-chain-strategy/
(43) https://www.businessnz.org.nz/news-and-media/media-releases/2018/intelligent-transport-systems-could-earn-$1.5-billion-a-year

IMPLICATIONS OF SUPPLY CHAIN INTEGRATION FOR WHOLESALE, MANUFACTURING AND AGRICULTURE

Both domestic and export businesses will need to assess what transport solution best fits their needs, including different options across transport modes (e.g. rail and coastal shipping).

Some manufacturers are outsourcing their transport needs to get custom designed freight solutions, with large exporters that historically organised their own transportation having moved to third party services.

Other businesses are managing the transportation of their goods themselves. These businesses require transport solutions specific to their needs as well as better control of frequency and reliability, particularly for fragile products.

The digitisation of freight also means greater traceability of product origin, quality attributes and production practices. With rising consumer expectations surrounding environmental sustainability (agricultural products in particular) this can create a pathway for food manufacturers and producers to provide traceability services and improve the value proposition to consumers.

E-COMMERCE AND ONLINE SHOPPING IS EXPANDING THE MARKET FOR T&L SERVICES...

Technology is shifting the dial

Technology is opening new markets to both T&L businesses and end-users that they can capture. Online shopping, estimated at $4.2b in New Zealand and is a key market for freight operators [44]. The market has capacity to grow with online shopping accounting for just 9% of the total retail spend and two-thirds of New Zealanders not shopping online yet[44].

To capture freight from online shopping, operators will need to develop specific business models and capabilities to compete for the 'last mile'. In addition, online consumers expect 'more for less', including time-sensitive deliveries and free shipping[45].

Implications for retail businesses

As a result of online shopping, retailers have reduced inventories and are increasingly delivering from distribution centres. This requires the management of both in-store stocks and online purchases for which freight operators will need to offer integrated solutions covering both sales channels.

Retailers must also manage the reliability of deliveries and can either choose to sell through online platforms or create their own online channel, which can provide greater logistical control.

While retail businesses risk losing ground to online sales, recent surveys show 57% of online consumers shop both in-store and online[46].

(44) New Zealand Post, 2019 New Zealand eCommerce Review, June 2019
(45) https://www.mckinsey.com/industries/travel-transport-and-logistics/our-insights/four-forces-to-watch-in-trucking-and-rail-freight
(46) https://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=12042091

...AND OPENING THE DOOR FOR NEW BUSINESS MODELS

Implications for hospitality

About half of New Zealanders use online services to order takeaways and a quarter of all food spending is now spent in restaurants or ready-to-eat meals[47]. Partnering with food delivery companies is a way for hospitality businesses to diversify revenue streams. However, adjustments to some existing business models might be required to achieve sustainable returns.

New kitchen-only businesses without customer seating or waiting areas are skipping the storefront altogether. These 'ghost restaurants' reduce leasing and operating costs by locating themselves in more affordable properties closer to their target markets.

Implications for property

Growth in e-commerce and online shopping is reshaping the traditional distribution model, including the demand and location for warehousing. As volumes delivered directly to customers grows, the commercial property market will need to continually adjust with its impact already being felt on property values.

There is strong demand and limited supply of industrial land, particularly in Auckland and Wellington and the T&L sector will need to provide logistics solutions in response to the sprawl of industrial and warehousing activity[48].

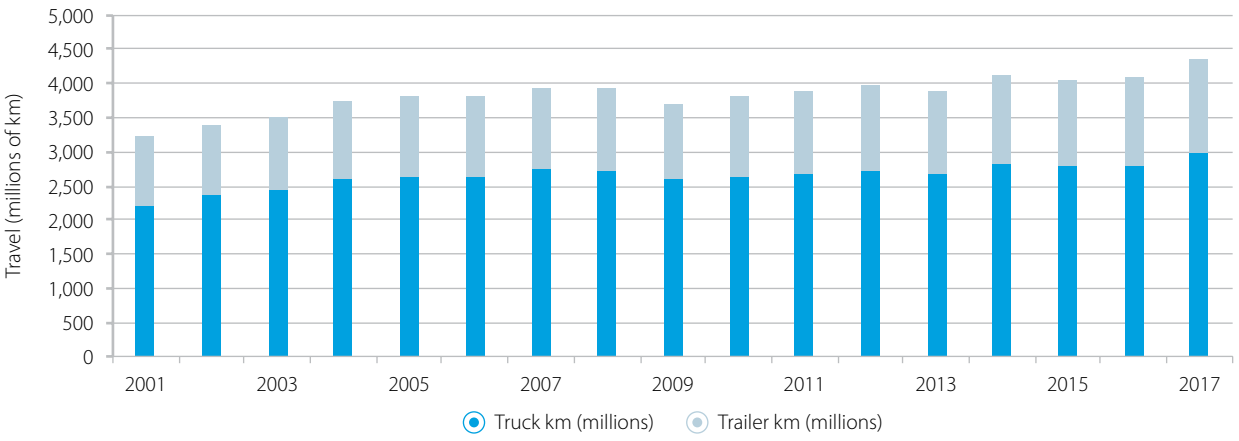
(47) 2018 Hospitality Report, Restaurant Association of New Zealand, 2018
(48) Warehouse and Industrial Property Reports, Colliers, 2019

APPENDICES

APPENDIX 1 ROAD TRANSPORT ACTIVITY

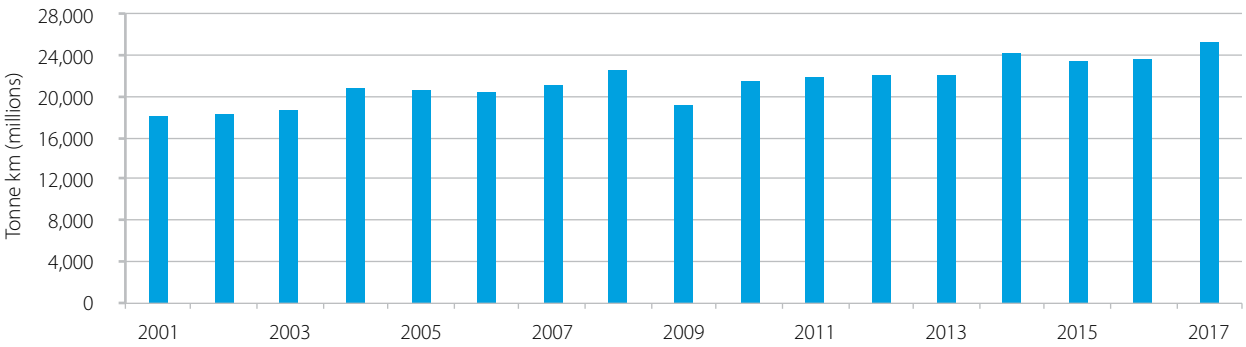
Truck and trailer kilometre travelled

Source: ANZ Analysis; Ministry of Transport



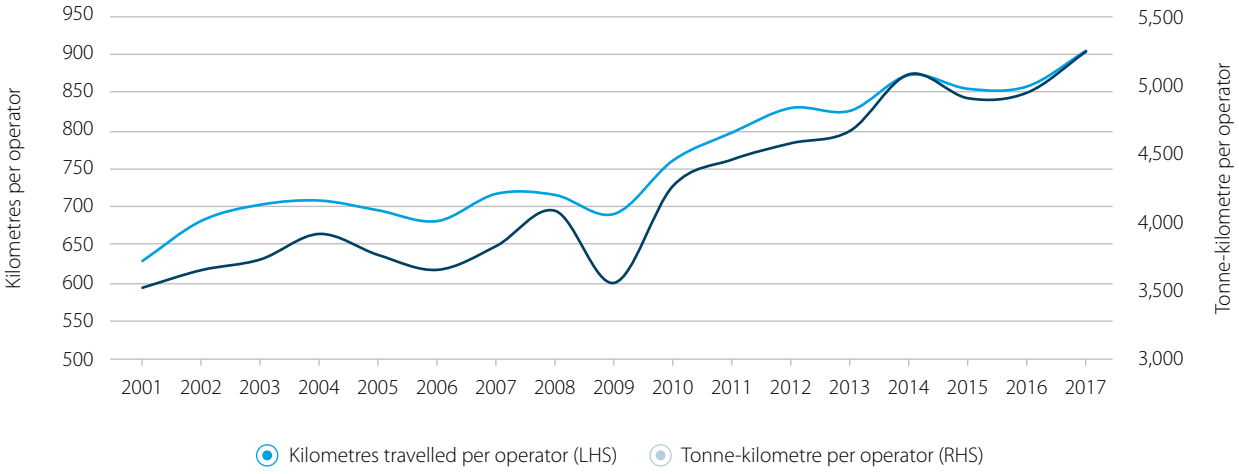
Truck and trailer tonne-kilometre travelled

Source: ANZ Analysis; Ministry of Transport



Average truck and trailer tonne-kilometre travelled per operator

Source: ANZ Analysis; Ministry of Transport; Statistics New Zealand; Annual

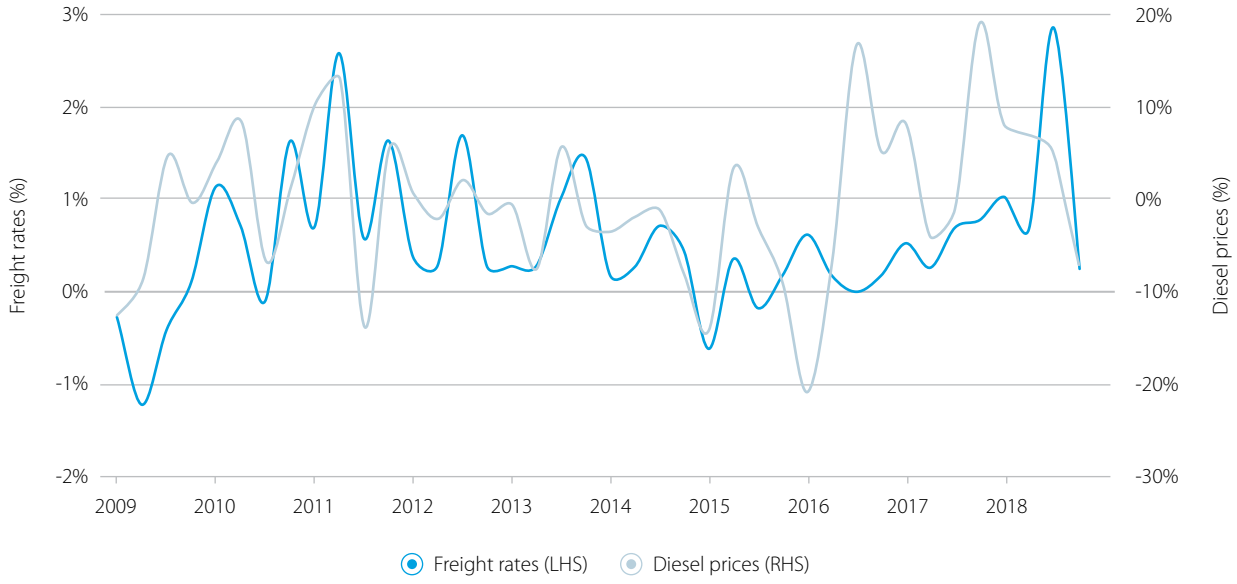


APPENDIX 2 FREIGHT RATES AND DIESEL PRICES

Road transport freight rates and diesel prices

Source: ANZ Analysis; Quarterly percentage change

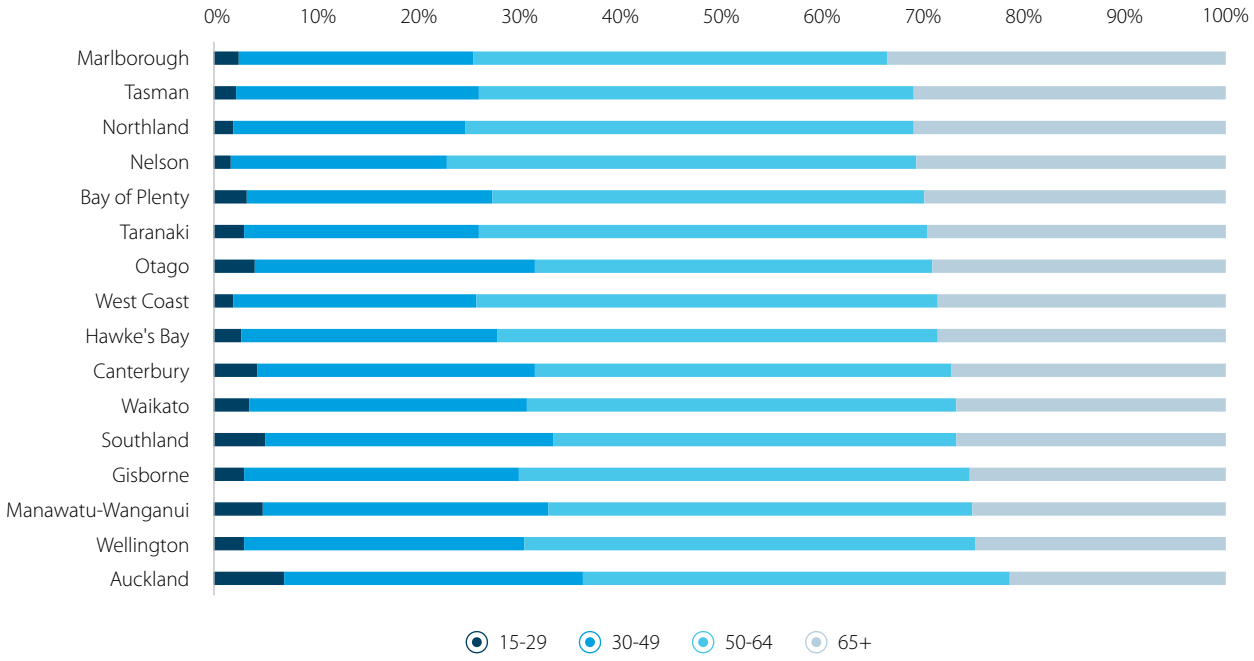
Statistics New Zealand – Producers Price Index; Ministry of Business, Innovation and Employment – Energy Prices



APPENDIX 3 HEAVY VEHICLE LICENCE

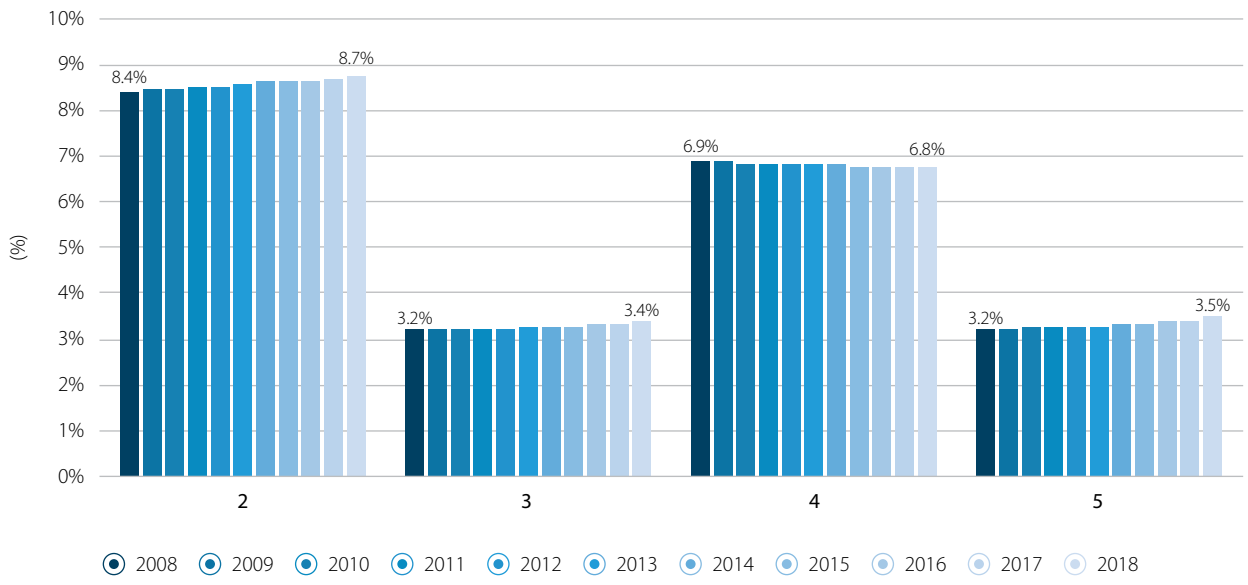
Heavy vehicle licence level five, age composition by region (2018)

Source: New Zealand Transport Agency, ANZ Analysis



Percentage of heavy vehicle female licences (2008-2018)

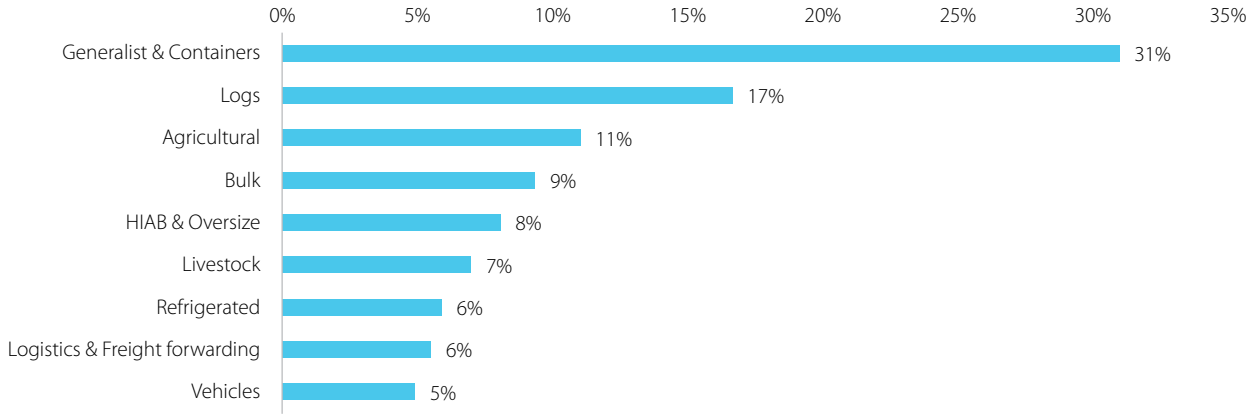
Source: New Zealand Transport Agency, ANZ Analysis



APPENDIX 4 OVERALL SAMPLE COMPOSITION

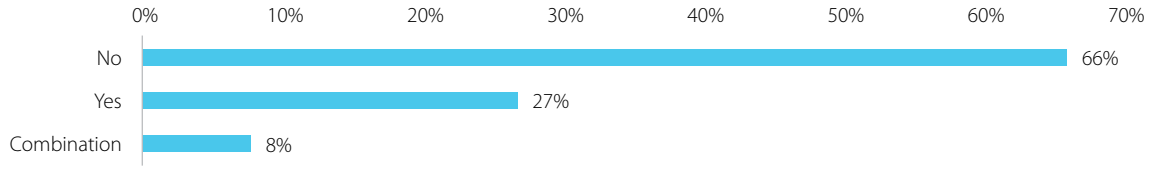
T&L operator sample by segment

Source: ANZ Analysis



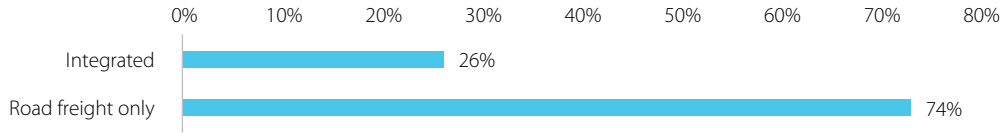
T&L operator sample by operating model

Source: ANZ Analysis; Owner driver?



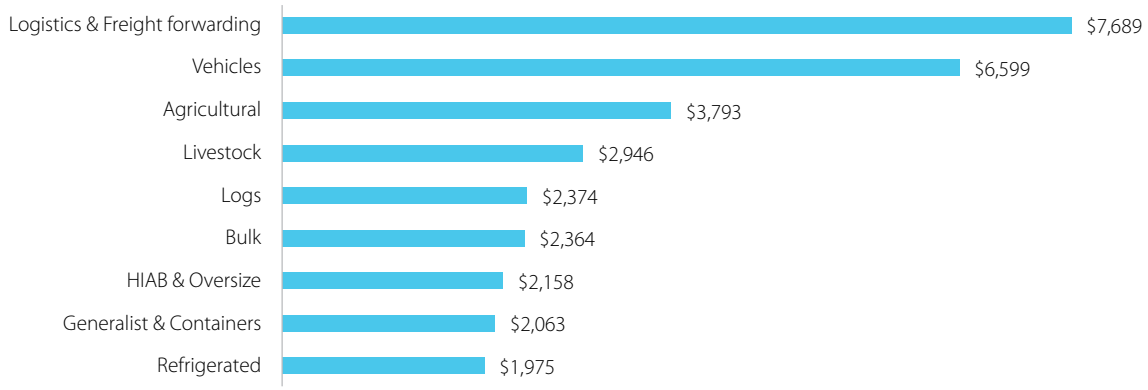
T&L operator sample by business model

Source: ANZ Analysis



T&L operator size by segment

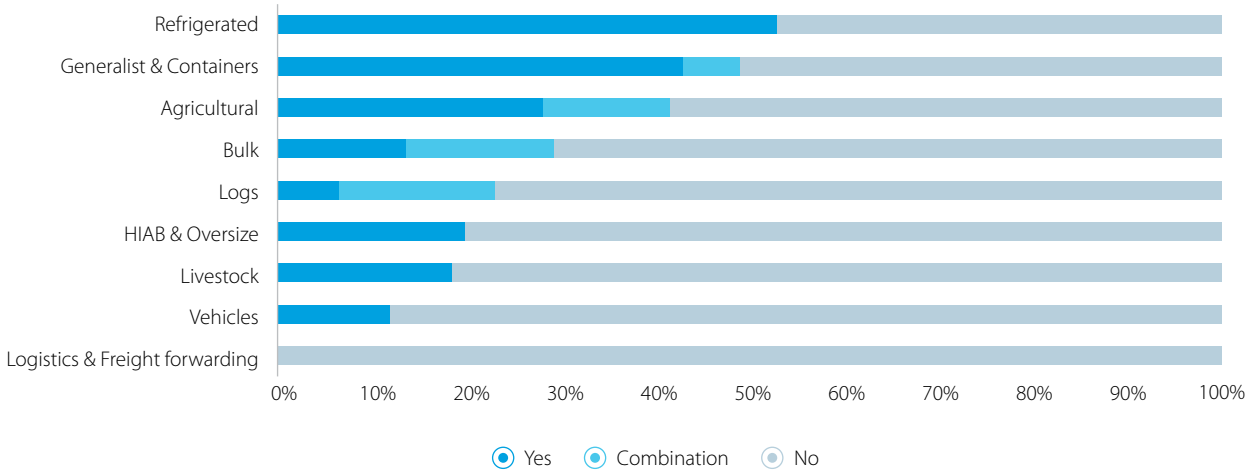
Source: ANZ Analysis; Average 2013-2018; Median annual sales revenue



APPENDIX 4 SAMPLE COMPOSITION BY SEGMENT

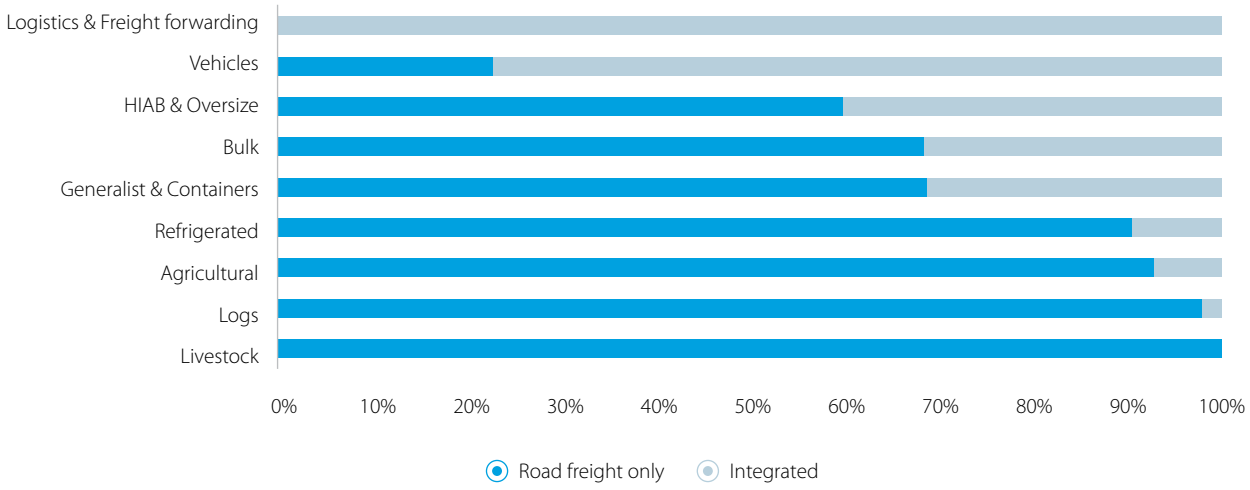
Operating model by freight segment

Source: ANZ Analysis; Owner driver?



Business model by freight segment

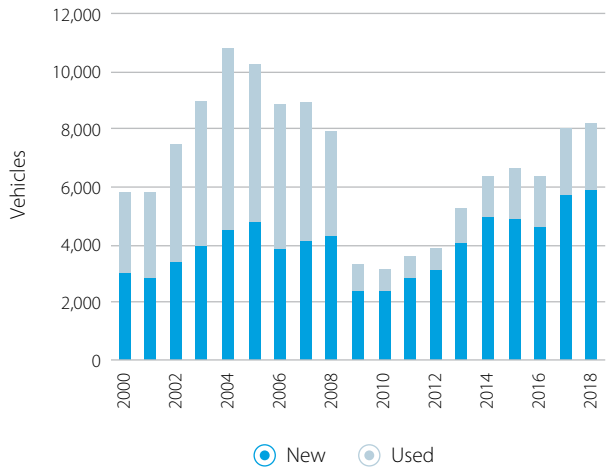
Source: ANZ Analysis



APPENDIX 5 HEAVY VEHICLE FLEET

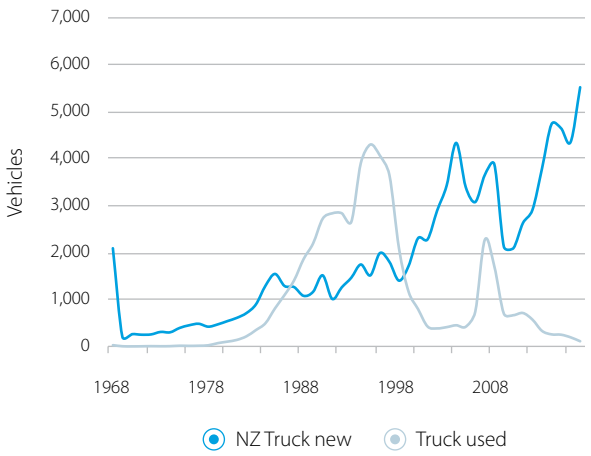
Heavy vehicle fleet registration

Source: ANZ Analysis; Ministry of Transport



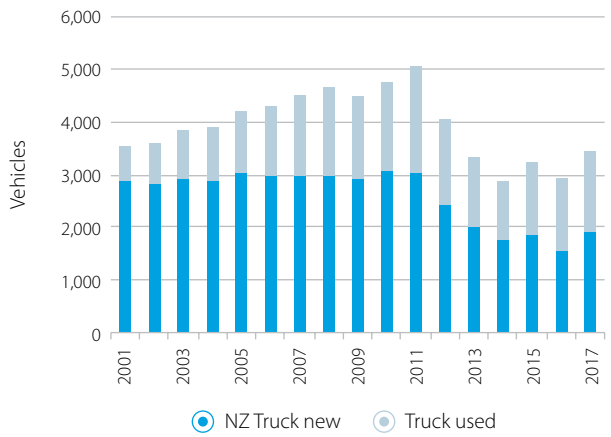
Heavy vehicle fleet year of manufacture

Source: ANZ Analysis; Ministry of Transport; December 2017



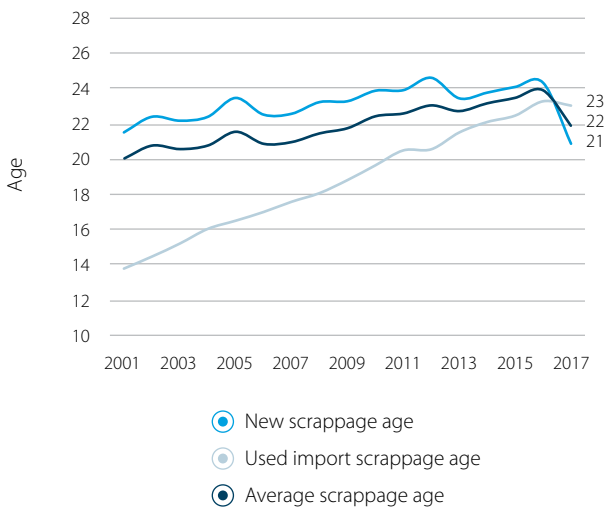
Number of vehicles leaving the heavy fleet

Source: ANZ Analysis; Ministry of Transport



Average age when leaving the heavy vehicle fleet

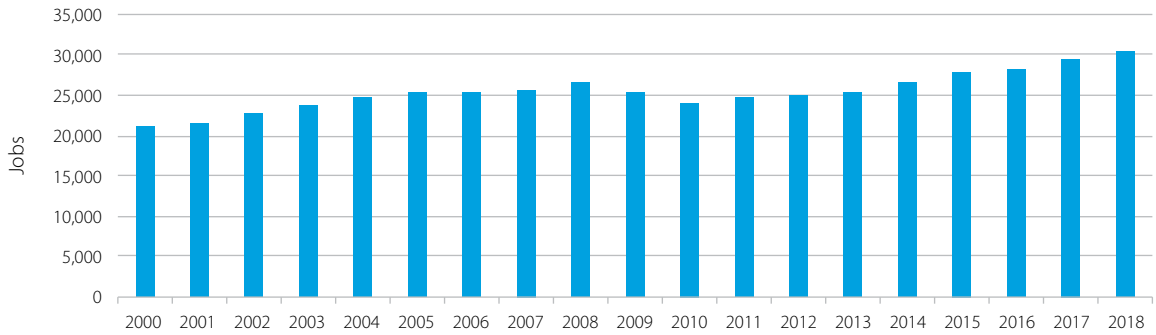
Source: ANZ Analysis; Ministry of Transport



APPENDIX 6 T&L JOBS AND OPERATORS

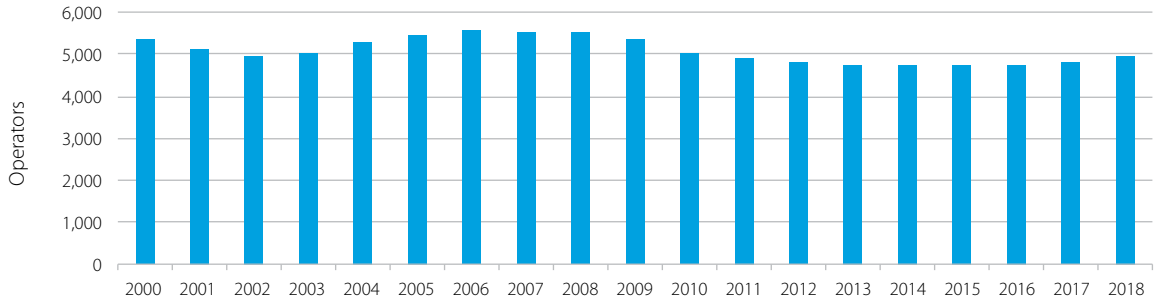
Road transport industry – total jobs

Source: ANZ Analysis; Statistics New Zealand



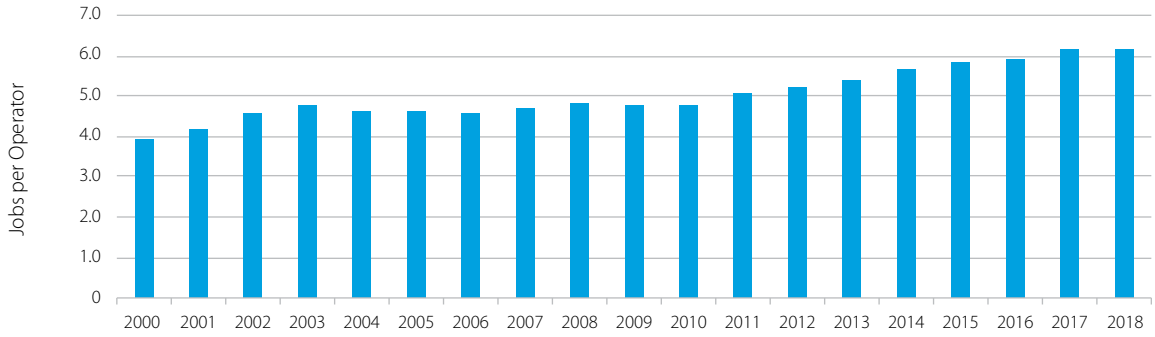
Road transport industry – total operators

Source: ANZ Analysis; Statistics New Zealand



Road transport industry – average jobs per operator

Source: ANZ Analysis; Statistics New Zealand



ANZ IS PROUDLY NEW ZEALAND'S LARGEST FINANCIAL SERVICES PROVIDER, WITH ALMOST HALF OF ALL NEW ZEALANDERS HAVING A BANKING RELATIONSHIP WITH US

We recognise that strong relationships are important for business and farming success, which is why here in our Commercial & Agri division, we support our clients with access to knowledge, insights and connections to help them grow.

As New Zealand increasingly looks to markets across the Asia-Pacific, we provide clients with access to banking knowledge and expertise in offshore markets to help New Zealand businesses achieve their growth aspirations.

For information about our services see anz.co.nz/business

CONTACT

Commercial & Agri Service Team

0800 212 269

comagri@anz.com

Disclaimer

This document has been prepared by ANZ Bank New Zealand Limited for informational purposes only. It is a necessarily brief and general summary of the subjects covered and does not constitute advice. You should seek professional advice relevant to your individual circumstances. While the information contained in this document is from sources perceived by ANZ to be reliable and accurate, ANZ cannot warrant its accuracy, completeness or suitability for intended use. ANZ shall not be obliged to update any such information after the date of this document. To the extent permitted by law, neither ANZ nor any other person involved in the preparation of this document accepts any responsibility or liability for any opinions or information (including the accuracy or completeness thereof) contained in it, or for any consequences flowing from its use.
©2019 ANZ Bank New Zealand Limited

This brochure is current as at October 2019 and the details in it are subject to change.

ANZ Bank New Zealand Limited 10/19 21168

anz.co.nz