

## Understanding Public Perceptions of Road Freight

**Prepared for:** National Transport Commission

**Prepared by:** Synovate

**Date:** July 2010



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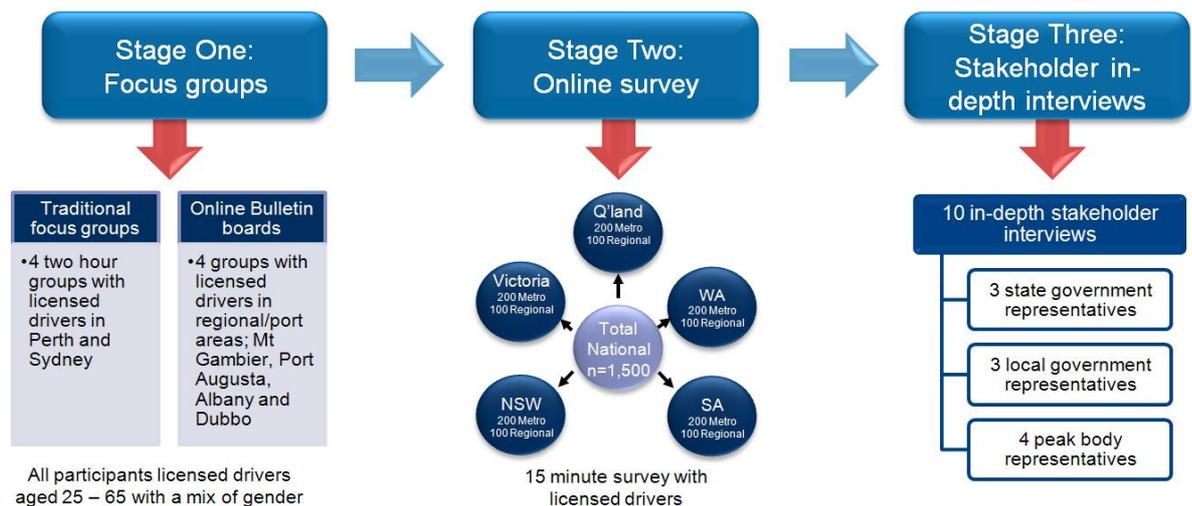
## 1. Executive Summary

This section of the report provides an overview of the project 'Understanding Public Perceptions of Road Freight' and summarises the key findings against the objectives. The overall objective of the research project was to provide NTC with information on public perceptions of freight vehicles. The NTC require information that will assist in understanding perceptions (both factually and non-factually based) of the general community in relation to the freight vehicles they hear about in the media and encounter on the road.

### 1.1 Approach

Synovate conducted a three stage approach, including a combination of qualitative (Stage 1 and Stage 3) and quantitative research (Stage 2).

- Stage 1 provided initial investigation to the perceptions of the driving public about general road use, driving with freight vehicles and reaction to the PBS scheme.
- This led to the questionnaire design for stage 2, where driver attitudes and perceptions were measured amongst the general public across 5 states. Significant differences are reported at the 95% confidence level.
- Stage 3 involved assessing key stakeholder reaction to the PBS Scheme and its path to implementation.



## 1.2 Summary of Target Audience Concerns

In most cases, trucks are not a 'top of mind' concern to everyday drivers and less so for weekend drivers. Freight movement and its importance to the daily lives of Australians and the Australian economy is also not 'a top of mind' connection. While concern is raised over the number of vehicles (congestion/traffic flow) on the road, this is not solely related to the number of freight vehicles. Larger vehicles, a more common reference when discussing size of vehicle than the term 'truck', includes SUV/4WD vehicles, commercial/delivery vans, people carriers, cars towing caravans or trailers. General public concerns when driving centre around three elements that impact on personal safety:

- Others behaviour while driving.
- The size of vehicles others drive.
- Road conditions and traffic controls.

Others driving behaviour raises the ever present fear of 'having an accident'. The size of a vehicle and the road conditions and traffic controls add to that fear by increasing the risk of greater physical and/or vehicle damage if a collision occurred.

## 1.3 Summary of Public Reaction to Freight Vehicles

Size of vehicle including length, and style of vehicle impact on driver opinion of the effect freight vehicles have on fears associated with driving beside or behind these trucks. General driver behaviour and attitude is based on fear for own safety and is not influenced by the size or type of vehicle the public owns or drives. Drivers of small to medium sedans exhibit the same concerns as drivers of larger vehicles. There is a strong belief that truck driver behaviour is likely to be reinforced by the type of vehicle a truckie chooses to drive. The public perceive that aggressive looking freight vehicles are likely to be driven by 'cowboys' with little regard for others on the road. This perception then strengthens the apprehension felt when passing or being passed by freight vehicles. Attitude to freight vehicle and freight driver are closely linked in public perception and there is some concern that attention to one without attention to the other would see little change in public concerns.

## 1.4 Connecting Driver Profiles and Reaction to PBS

Reaction to the PBS concept varies with level of concern with freight vehicles generally.

- 12% are generally very concerned and strongly agree with all statements regarding PBS.
  - **The worriers who see PBS as a solution.**
- 44% are concerned and agree with most statements regarding PBS.
  - **The concerned but not obsessed who welcome PBS as a possible solution.**
- 37% are less concerned and are neutral on agreement with statements regarding PBS.
  - **The realists who accept that change is difficult to achieve, but the problem is not that big, almost 'not broken no need to mend' attitude.**
- 7% are unconcerned and disagree on statements regarding PBS.
  - **The unconvinced who do not see any real problems, but do not believe PBS can bring about change either.**

## 1.5 The Main Issues for PBS

Regardless of status on concerns and reaction to PBS, there are three responses for which agreement is high and very consistent. These statements are:

- "The cost of the project will be passed down to consumers".
- "These PBS vehicles will still damage roads and bridges".
- "It is not about the truck but the drivers behaviour".

## 1.6 Conclusions

General public is not overly 'truck conscious', concerns as a driver centre on personal safety and risk associated with other's driving behaviour. General public has very low awareness of PBS at this time but is very positive to the messages on increased safety, better economic performance and less effect on the environment.

## 2. Project Overview

### 2.1 Project Background

National Transport Commission (NTC) develops reforms to improve safety, productivity and environmental outcomes for the transport industry, which are then implemented by state governments. A key reform is the 'Performance Based Standards' (PBS) scheme, which offers the potential for heavy vehicle operators to achieve higher productivity safely through innovative vehicle design (High Performance Vehicles – HPV's). PBS governs what a vehicle can do, not what it should look like, but sets minimum vehicle 'performance' standards to ensure trucks are stable on the road, and can turn and stop safely (SMART trucks).

### 2.2 Project Objectives

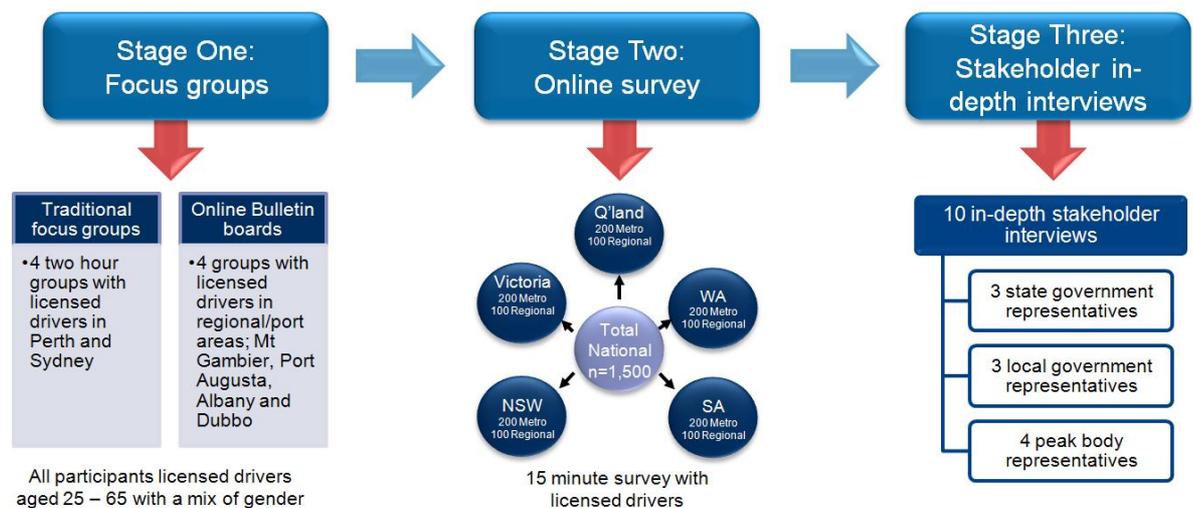
The NTC require information that will assist in understanding perceptions (both factually and non-factually based) of the general community in relation to the freight vehicles they hear about in the media and encounter on the road.

**The overall objective was to provide the National Transport Commission with firstly an understanding of the general public's perception of road freight transport and secondly to measure the incidence of those beliefs and attitudes across a sample of the Australian population.**

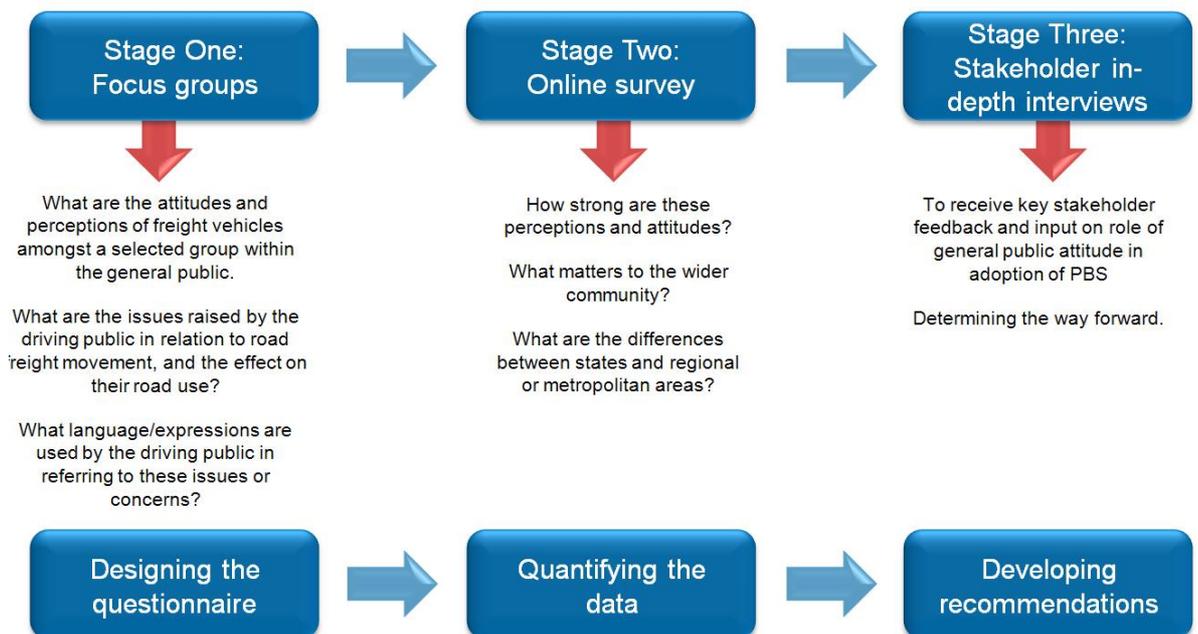
## 2.3 Approach

Synovate conducted a three stage approach, including a combination of qualitative (Stage 1 and Stage 3) and quantitative research (Stage 2).

- Stage 1 provided initial investigation to the perceptions of the driving public about general road use, driving with freight vehicles and reaction to the PBS scheme.
- This led to the questionnaire design for stage 2, where driver attitudes and perceptions were measured amongst the general public across 5 states. Significant differences are reported at the 95% confidence level.
- Stage 3 involved assessing key stakeholder reaction to the PBS Scheme and its path to implementation.

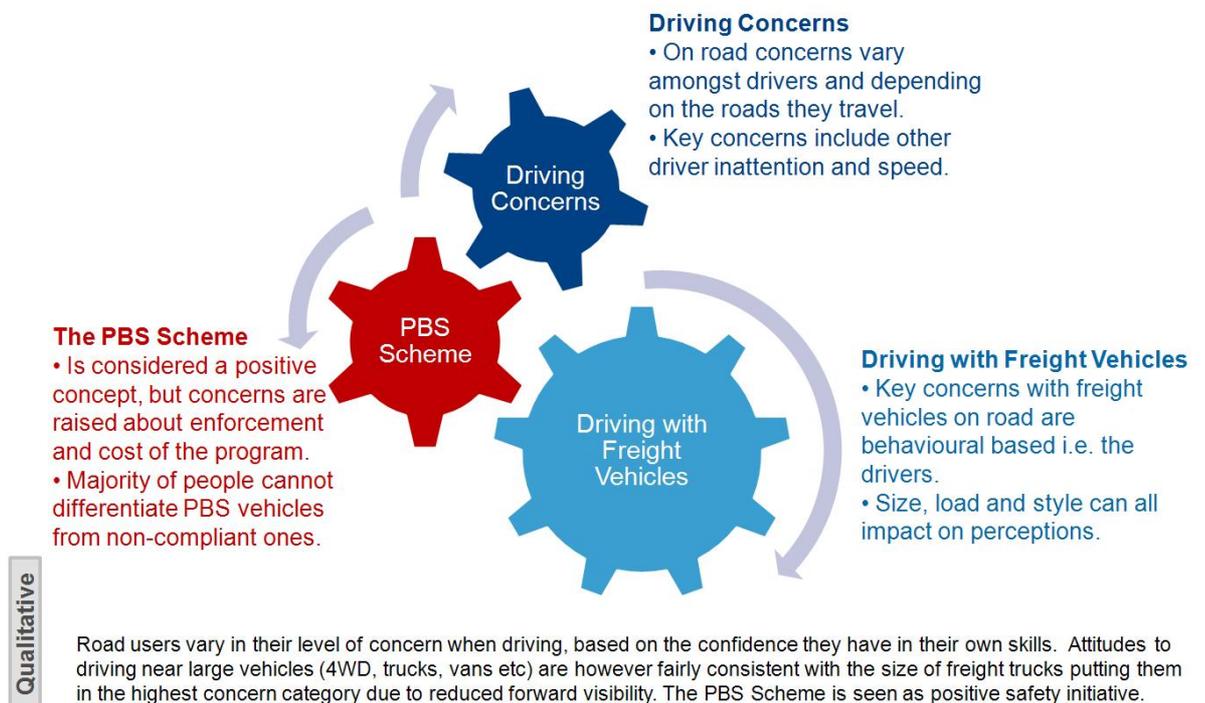


## 2.4 Objectives by Stage



## 3. Qualitative Key Findings

### 3.1 Summary of Qualitative Outcomes



### 3.2 Qualitative Key Findings

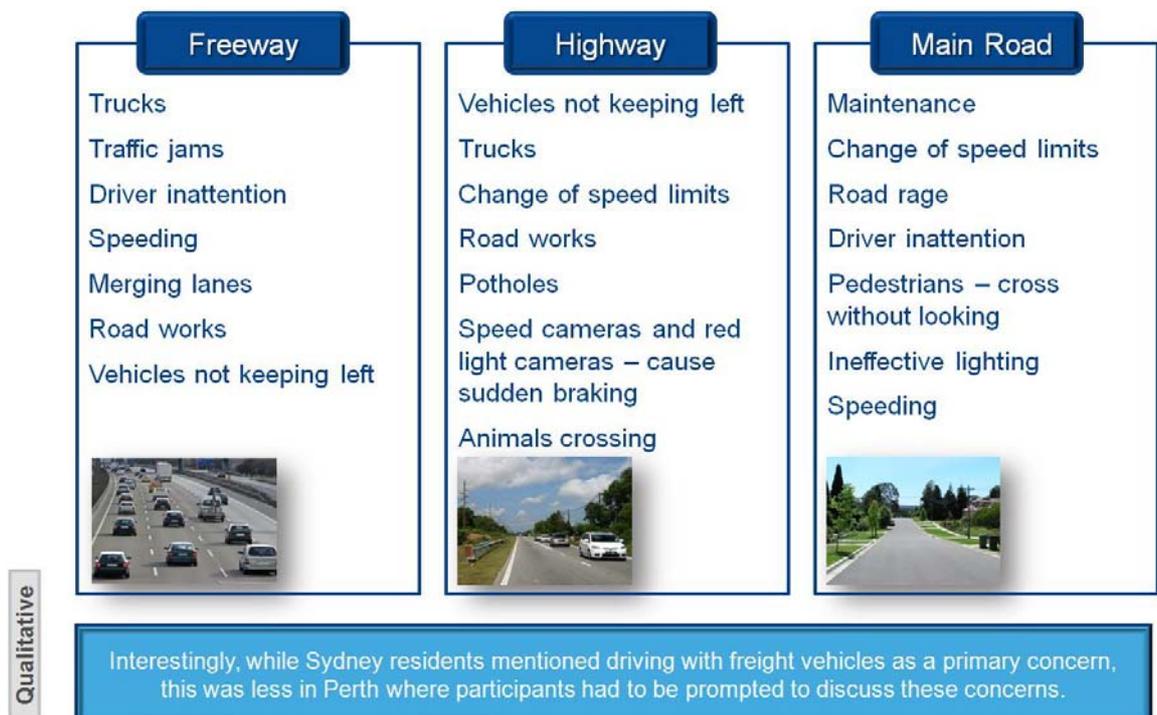
Driving concerns vary slightly depending on the type of road travelled, but the size of other vehicles is a major concern, with a similar rise in concern about driver control of larger vehicles. Concerns in driving with freight vehicles centre around speed (which increases in relation to size of freight vehicle), and the perception that freight vehicles create an obstacle which impacts the driver's visibility and sense of control. Freight vehicle style impacts on level of concern and driver comfort in travelling on the road with large freight vehicles. The PBS scheme is supported by the public but needs to be effectively communicated to answer all of their associated questions and relieve their worry about costs implications:

- PBS has the ability to reduce or eliminate majority of concerns regarding freight vehicles on the road, with the exception of driver behaviour.
- PBS vehicles should be visually marked to increase both awareness and a closer association with benefits of the scheme to the general public.
- The PBS scheme could consider a program that promotes 'SMART' vehicle compliance with driver 'safety' certification to relieve negative perceptions of the human element of driving with freight vehicles.

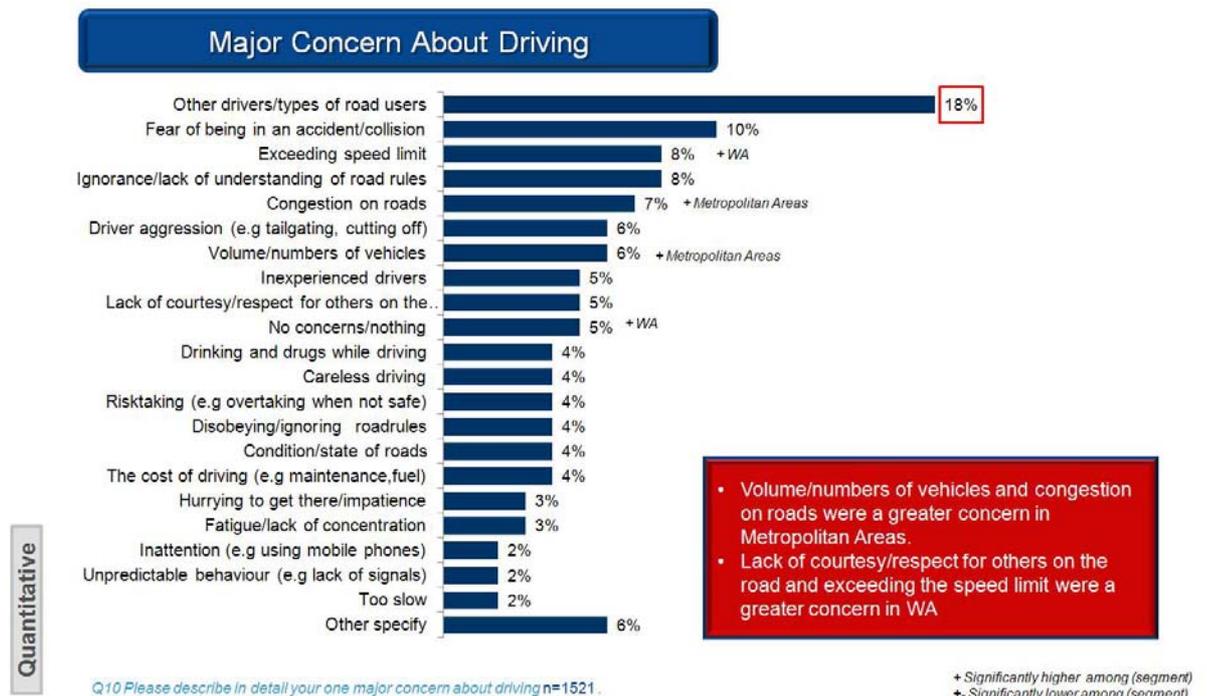
These findings informed the development of the quantitative questionnaire which was then used to measure public opinion and attitude.

## 4. Concern of General Public

### 4.1 Driver concerns vary depending on the type of roads travelled

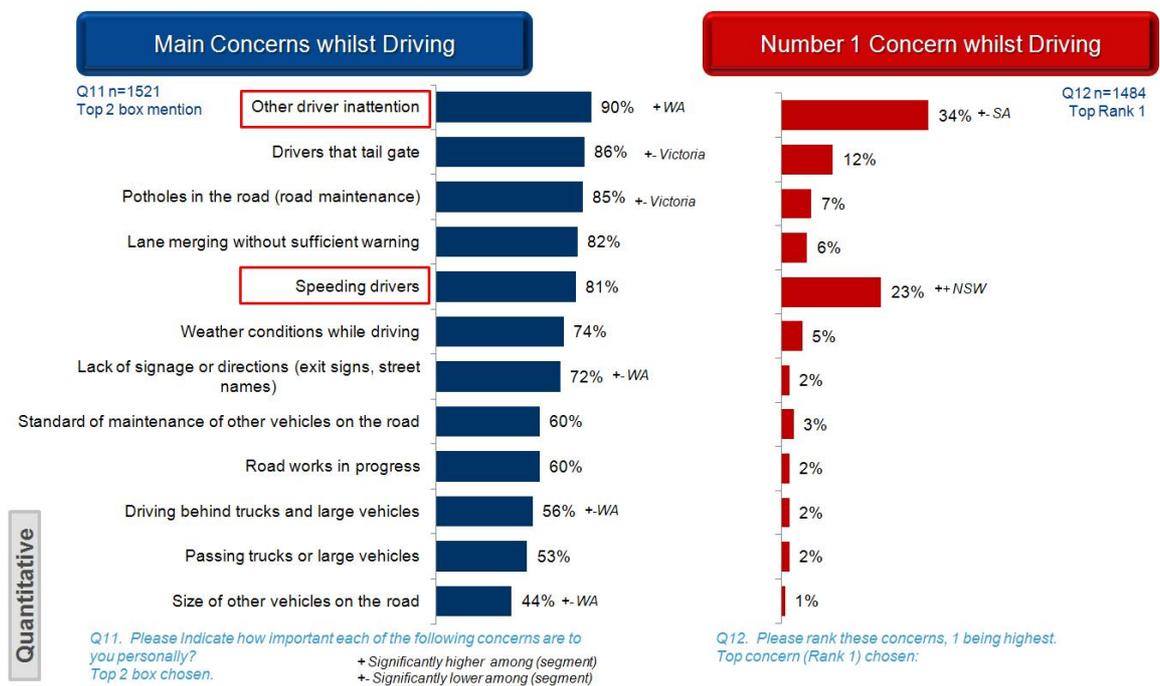


## 4.2 The behaviour of 'other drivers' is a key concern



## 4.3 Inattention and speed demonstrated by 'other drivers' are the main concerns

Other driver inattention is a bigger concern in WA.



## 4.4 Summary of Target Audience Concerns

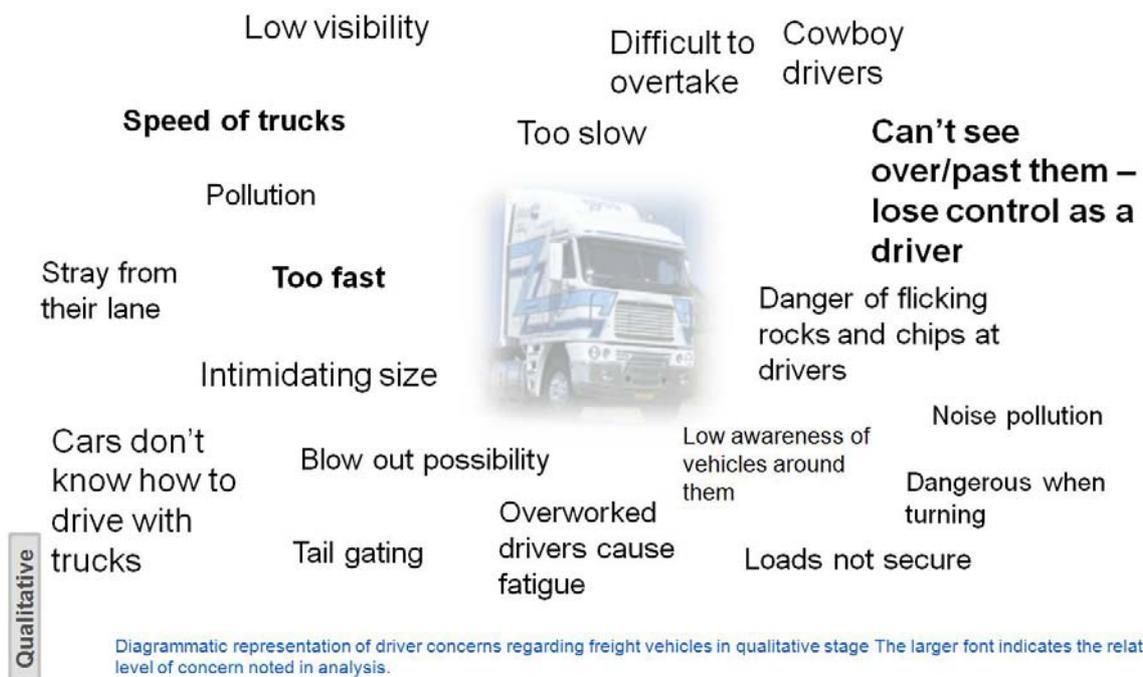
In most cases, trucks are not a 'top of mind' concern to everyday drivers and less so for weekend drivers. Freight movement and its importance to the daily lives of Australians and the Australian economy is also not 'a top of mind' connection. While concern is raised over the number of vehicles (congestion/traffic flow) on the road, this is not solely related to the number of freight vehicles. Larger vehicles, a more common reference when discussing size of vehicle than the term 'truck', includes SUV/4WD vehicles, commercial/delivery vans, people carriers, cars towing caravans or trailers. General public concerns when driving centre around three elements that impact on personal safety:

- Others behaviour while driving.
- The size of vehicles others drive.
- Road conditions and traffic controls.

Others' driving behaviour raises the ever present fear of 'having an accident'. The size of a vehicle and the road conditions and traffic controls add to that fear by increasing the risk of greater physical and/or vehicle damage if a collision occurred.

## 5. Perceptions of Freight Vehicles

### 5.1 Expressions recorded in the qualitative research to describe experiences of driving with freight vehicles relate to 'safety' aspects



## 5.2 How does driving with freight vehicles make drivers feel?

- Speed, 'cowboy' drivers, turning capacity of trucks, loads not secure.
- Reduced visibility, passing long trucks, truck driver lack of awareness of vehicles around them.
- Possibility of blowouts, straying from their lanes, rocks flying up from the road.
- Too slow. (on hills, acceleration)

Intimidated

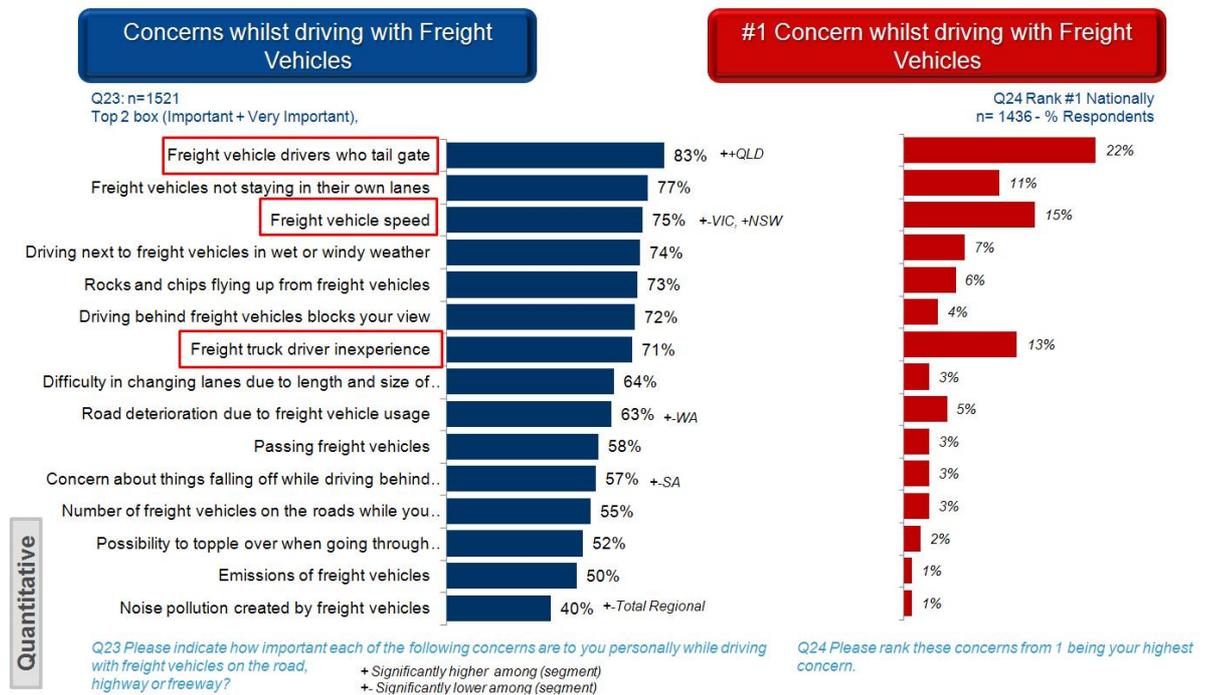
Vulnerable

Unsafe

Frustrated

In the main, feelings about freight vehicles are associated with perceptions of 'aggressive' driving by the truckies. On the other hand the driving public may experience a sense of frustration at the inability of the large vehicle to maintain what they perceive as an appropriate speed in other situations.

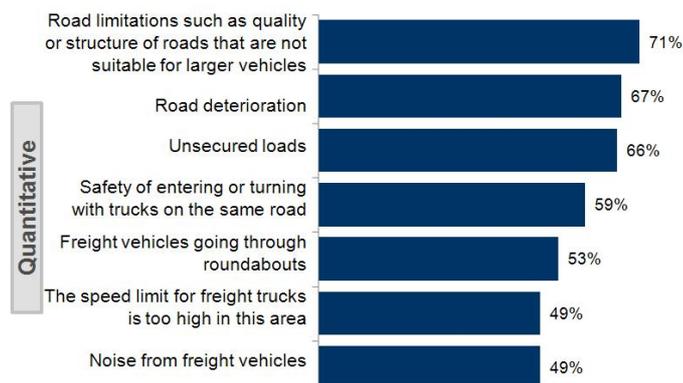
## 5.3 Concerns with freight vehicles are related primarily to freight vehicle driver behavior



## 5.4 Road limitations (structure) and road deterioration (wear and tear) are concerns more so than personal safety from a resident perspective

For Australian residents, trucks are not seen as often in their residential environment, with most encountered while driving outside their local area. Those who did encounter trucks around their homes were generally concerned about noise pollution, which is a lesser concern than when driving with trucks on freeways or highways.

Noise pollution for residents was primarily described as 'horns and squealing brakes being heard at unsociable hours' (after 7pm and before 7am).



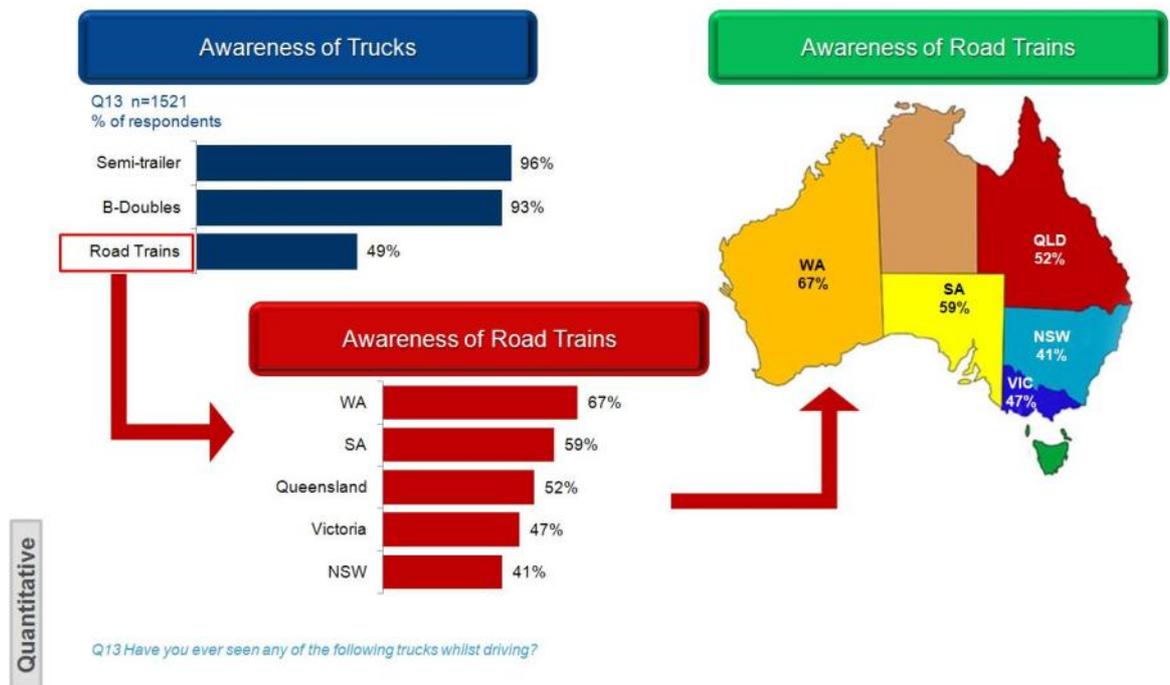
Q25 Thinking about being a resident in your local area / suburb, on a scale from 1 to 5, please rate your agreement that the following is a concern for you as a resident.



Q25 n=1521  
Top 2 box (Agree + Strongly Agree) with concern

## 5.5 Familiarity with semi-trailers and B-doubles is far greater than for road trains.

WA has the highest awareness of Road Trains, and NSW the lowest.



## 5.6 The larger the vehicle the more concerns the driving public have.

Qualitative participants feel more comfortable driving with smaller trucks up to the size of a semi-trailer. The B-doubles cause greater concern with general perceptions that they need longer braking times (distance before stopping), are heavier vehicles which cause road infrastructure damage (pavement wear and tear) and the potential to roll over due to height/load thus causing more serious accidents. These longer vehicles also require more time to overtake, making the general public drivers feel more vulnerable when trying to pass them on an open road. Generally the driving public try to avoid being near trucks while on the road. The public had experience of driving alongside a road train, but usually on regional roads where they expect to encounter these vehicles and the road conditions are more suited to their needs.



Semi-Trailer



B-Double

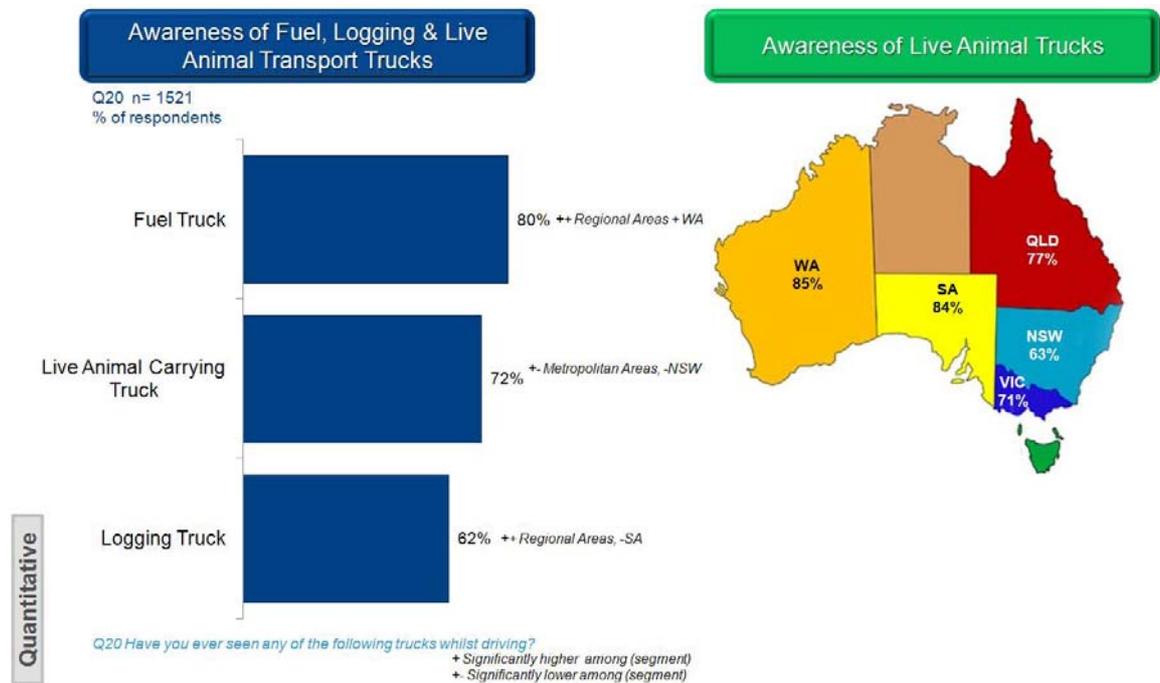


Road Train

Qualitative

## 5.7 Fuel trucks are most likely to be sighted, while live animal transport and logging trucks also have high recall

Awareness of live animal transports varies per state, but is highest in WA and lowest in NSW.





## 5.8 Type of load does impact on driver perceptions



Concerns primarily based around logistics of driving next to or behind these vehicles (strong smell, potential for fly off matter)

Emotional concern amongst a minor group over the animals tight fit and the humanity of carrying live animals.

*"I hate travelling behind them the smell is horrible and you don't want their poop to fly off at you."*



Two different mindsets regarding fuel trucks.

- These trucks attract more negativity due to the perceived risks associated with flammability of the fuel.
- These trucks are safer due to the higher precautions taken to minimise risks involved with crashing and tighter regulation on drivers capability and truck design.

*"I feel safer as I figure they of all trucks would have the highest safety standards."*

*"If they [petrol tankers] crash it would be worse."*

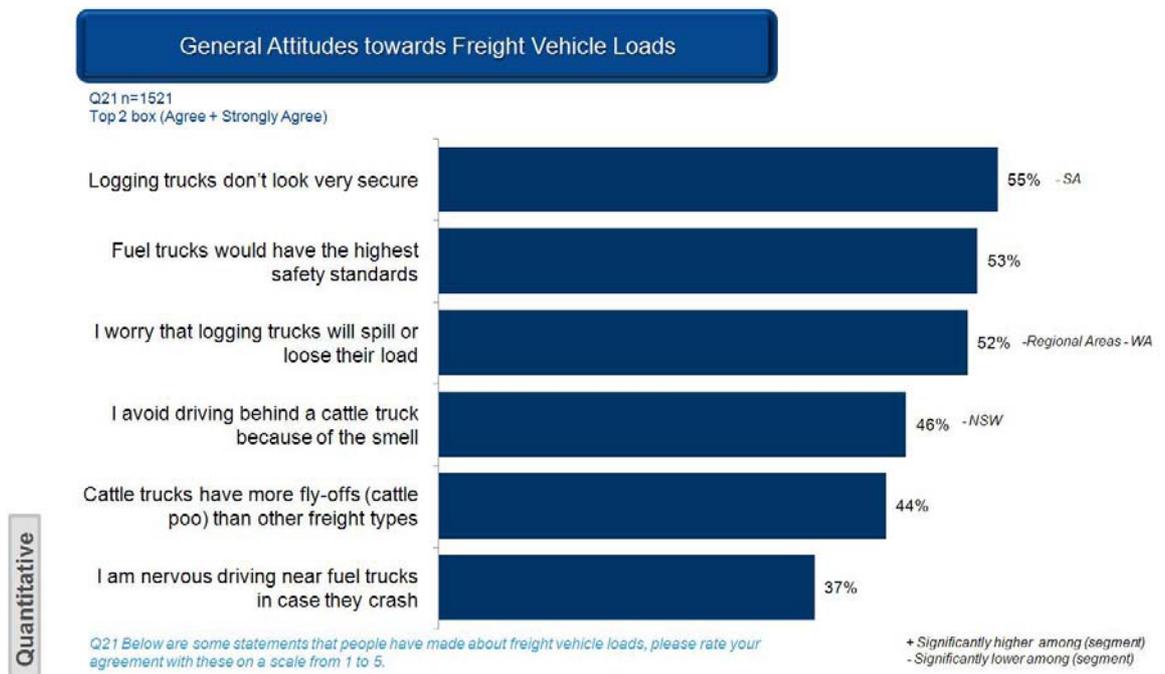


Concerns primarily based around perceptions of load security. The logs do not look overly secure causing drivers to feel uneasy when driving behind or alongside them.

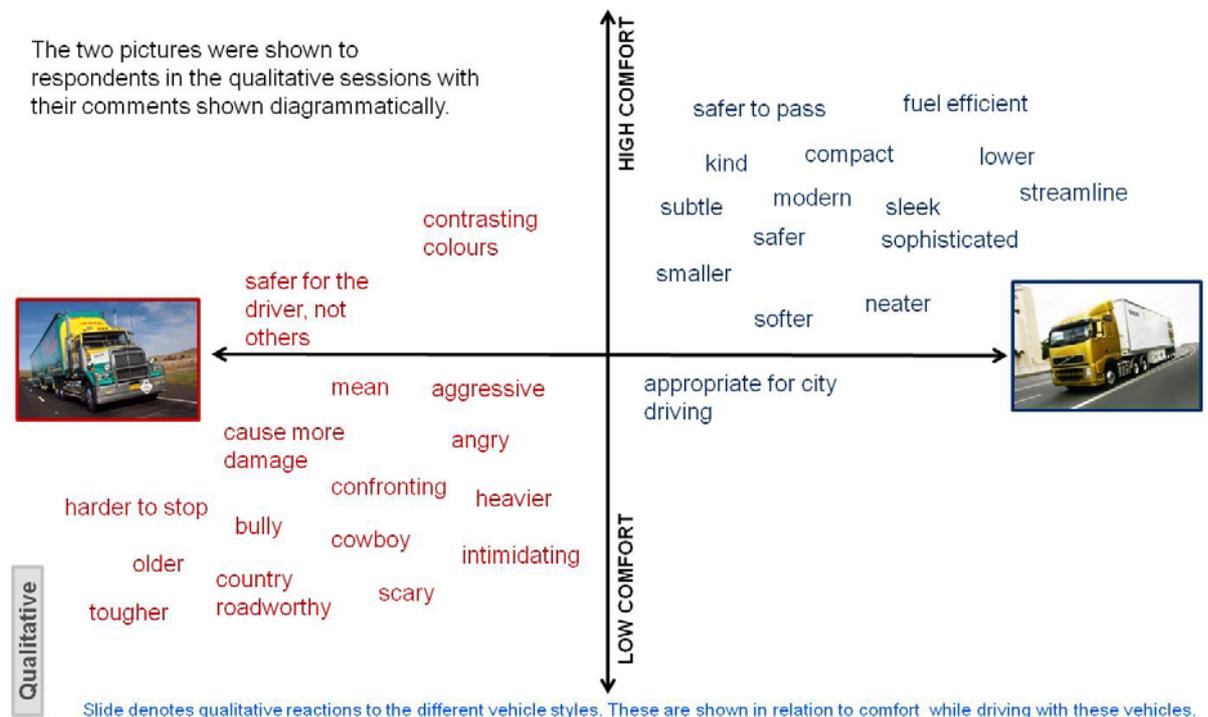
*"I always worry that the logs will fall off, they don't look very secure."*

Qualitative

## 5.9 General public are most concerned about the load safety of logging trucks

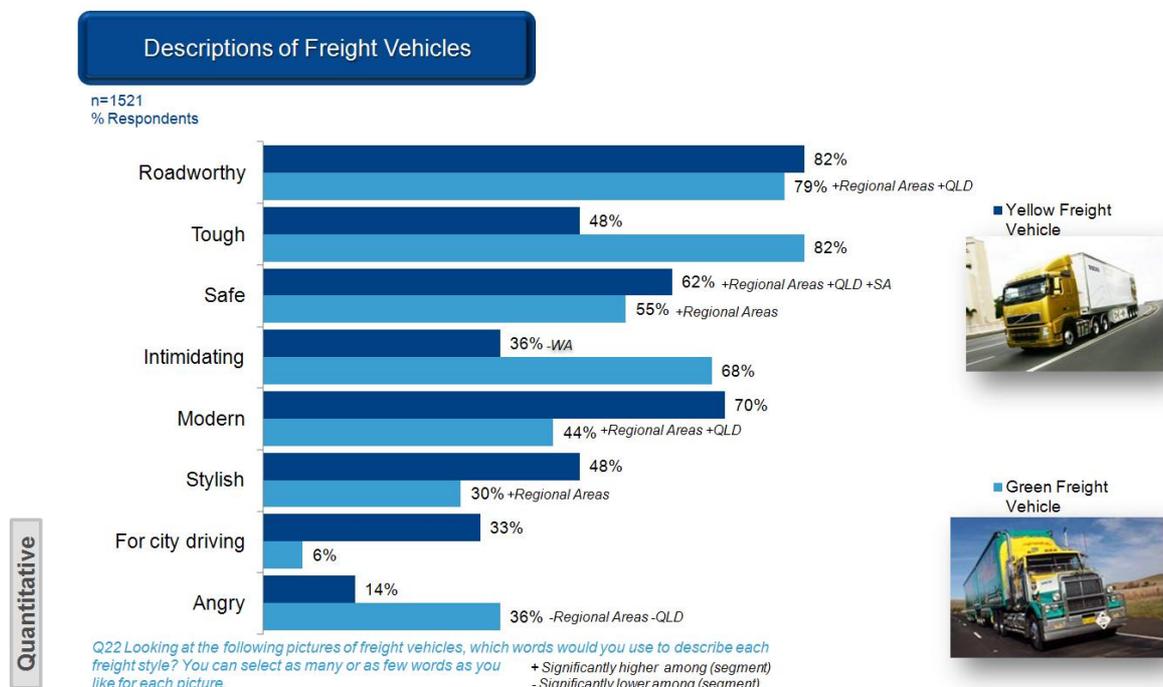


## 5.10 Style and design can impact on levels of concern and comfort of driving with freight trucks



## 5.11 Both trucks are considered roadworthy, however the US styled vehicle looks tougher, more intimidating, whilst the European style looks modern

Perceptions of green freight vehicles were different in Regional Areas.



## 5.12 Summary of Public Reaction to Freight Vehicles

Size of vehicle including length, and style of vehicle impact on driver opinion of the effect freight vehicles have on fears associated with driving beside or behind these trucks. General driver behaviour and attitude is based on fear for own safety and is not influenced by the size or type of vehicle the public owns or drives. Drivers of small to medium sedans exhibit the same concerns as drivers of larger vehicles. There is a strong belief that truck driver behaviour is likely to be reinforced by the type of vehicle a truckie chooses to drive. The public perceive that aggressive looking freight vehicles are likely to be driven by 'cowboys' with little regard for others on the road. This perception then strengthens the apprehension felt when passing or being passed by freight vehicles. Attitude to freight vehicle and freight driver are closely linked in public perception and there is some concern that attention to one without attention to the other would see little change in public concerns.

## 6. Reactions to the PBS Scheme

### 6.1 The PBS Scheme

The following description was put before respondents in the qualitative sessions and in the on-line survey.

The key feature of the Performance Based Standards (PBS) scheme is that it focuses on **how well the vehicle behaves on the road**, rather than prescriptive dimensions and mass limits.

PBS provides a framework for **SMART trucks and buses**, the name given to vehicles that are PBS compliant after testing.

Under the PBS scheme freight vehicles are subject to **16 safety standards**, which traditional truck designs do not have to meet. This sets them apart from a traditional freight vehicle. These include testing the ability of the truck to turn safely; testing that it will not 'fishtail'; testing that it is stable on the road and that the trailer will not sway.

There are also standards relating to the truck's ability to drive up a hill without rolling back and the acceleration capacity of the vehicle.

All trucks are tested with loads on to ensure they can carry that amount of load safely. SMART vehicles can carry **more** freight and passengers, and operate safely on the road.

The end result is **fewer trucks** on the road for the **same freight task**, **improved road safety**, **less transport emissions** and a more competitive domestic economy.

Respondents were then asked to rate their agreement or disagreement with a list of statements.

## 6.2 Reaction to the PBS scheme is positive but raises some questions in the group sessions



### Agree

- It would make them (trucks) less intimidating.
- It could be plausible if the money is there to do it.
- Increases safety of trucks and cars on the road, specifically with the increased turning abilities.
- Decreases number(of trucks) on the road at the same time; environmental and safety benefits.

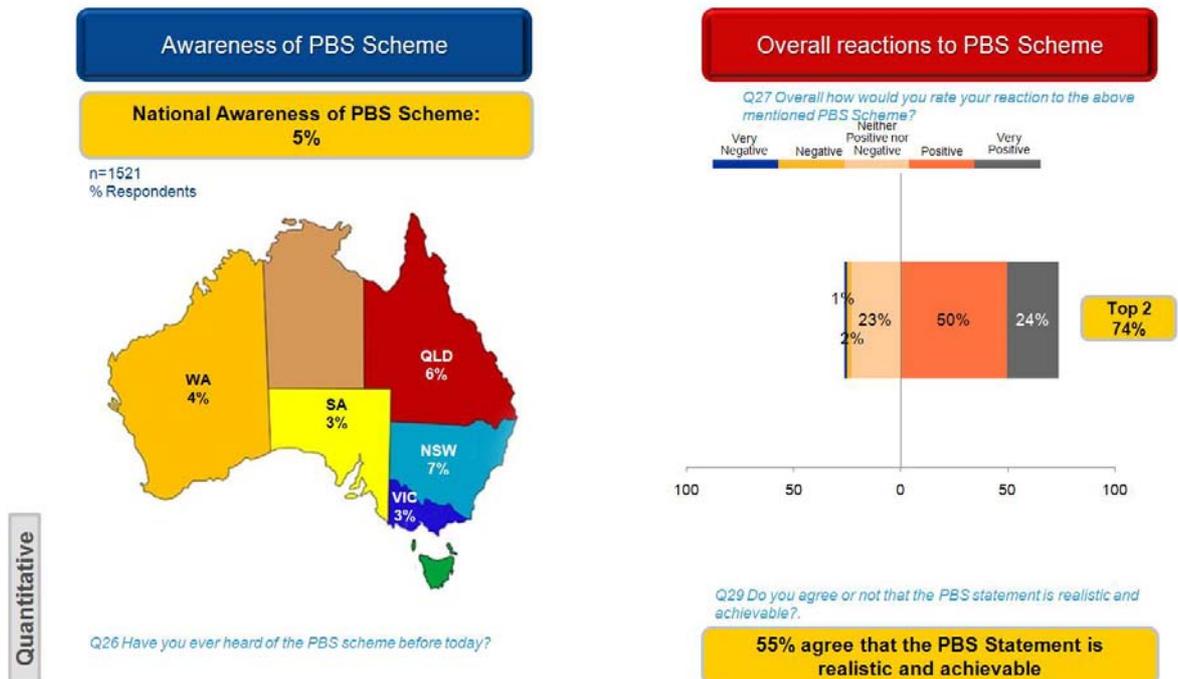
*“When is it going to be implemented? Sooner is better than later”.*

### Question

- Where will the budget come from? Tax payers?
- Who is behind it and enforcing it?
- How long will it take to implement?
- It still doesn't remove the human element of (truck) drivers.
- Cost to general public – higher freight costs?

*“Who is going to foot the bill? The tax payers? If its the truck companies than all our prices will go up, we will pay more for groceries.”*

### 6.3 Awareness of PBS Scheme is low. After reading the statement, the reaction was positive for three quarters of the target audience



**6.4 The majority of people are not aware of PBS. One third of those who are aware have no connection to the industry.**

**PBS Knowledge**  
Q26 Have you ever heard of the PBS scheme before today?

|  | Yes<br>(n=70) | No<br>(n=1330) | Unsure<br>(n=21) <sup>***</sup> |
|--|---------------|----------------|---------------------------------|
| I am a truck driver<br>(n=18) <sup>***</sup>                             | 9.4%          | 1.2%           | 1%                              |
| I have previously been a truck driver<br>(n=141)                         | 28.3%         | 10.9%          | 19.8%                           |
| I have close friends or family members that are truck drivers<br>(n=256) | 26.4%         | 21.6%          | 31.3%                           |
| I have never driven a truck<br>(n=714)                                   | 35.8%         | 66.2%          | 47.9%                           |

<sup>\*\*\*</sup> small sample size, interpret with caution

Quantitative

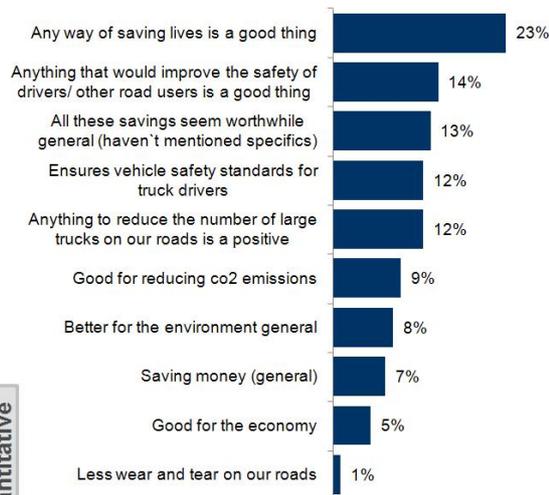
Trucking Industry Involvement

Q35 Which of the following best describes you?

## 6.5 Positive reaction to the PBS Scheme is based on perceived safety elements, the fewer negative reactions were based on scepticism of driver behaviour

### Explanation of Positive Reactions to PBS Scheme

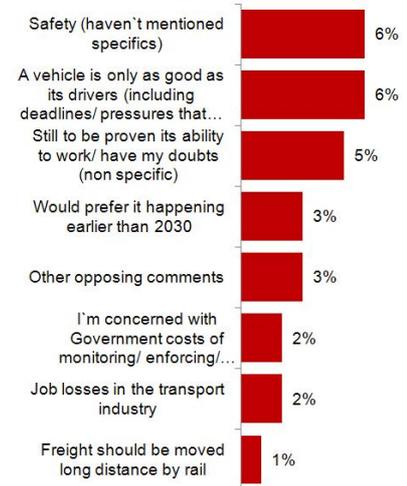
n=1521  
% Respondents+



Quantitative

Q28 Please explain why you provided that rating.

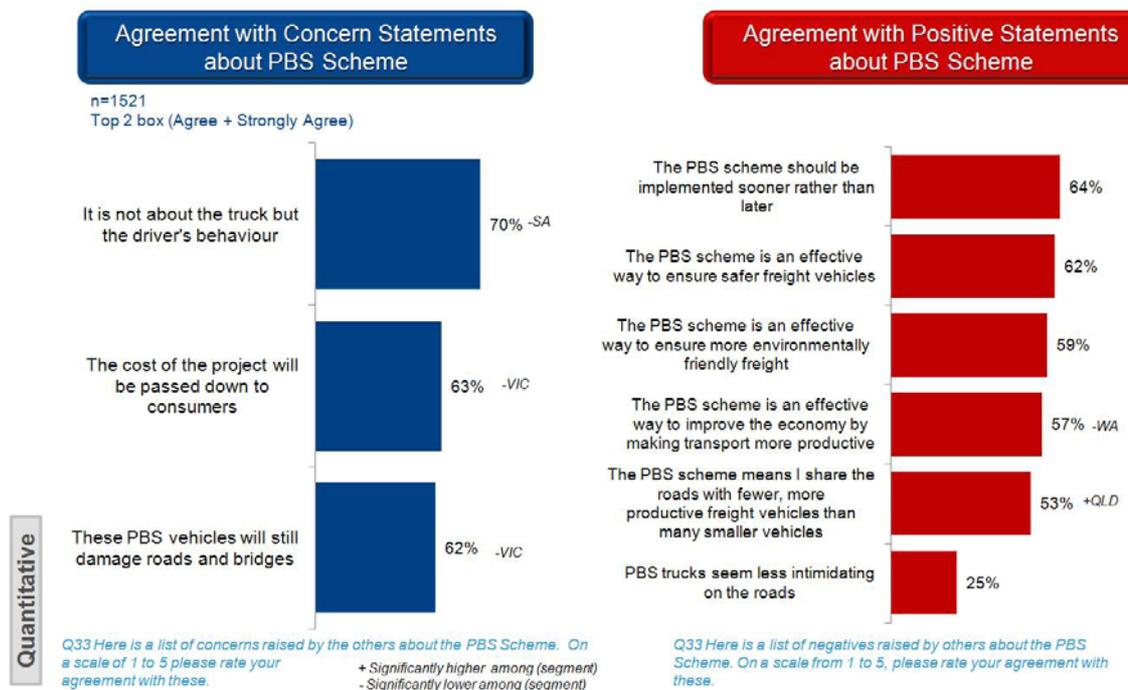
### Explanation of Negative Reactions to PBS Scheme



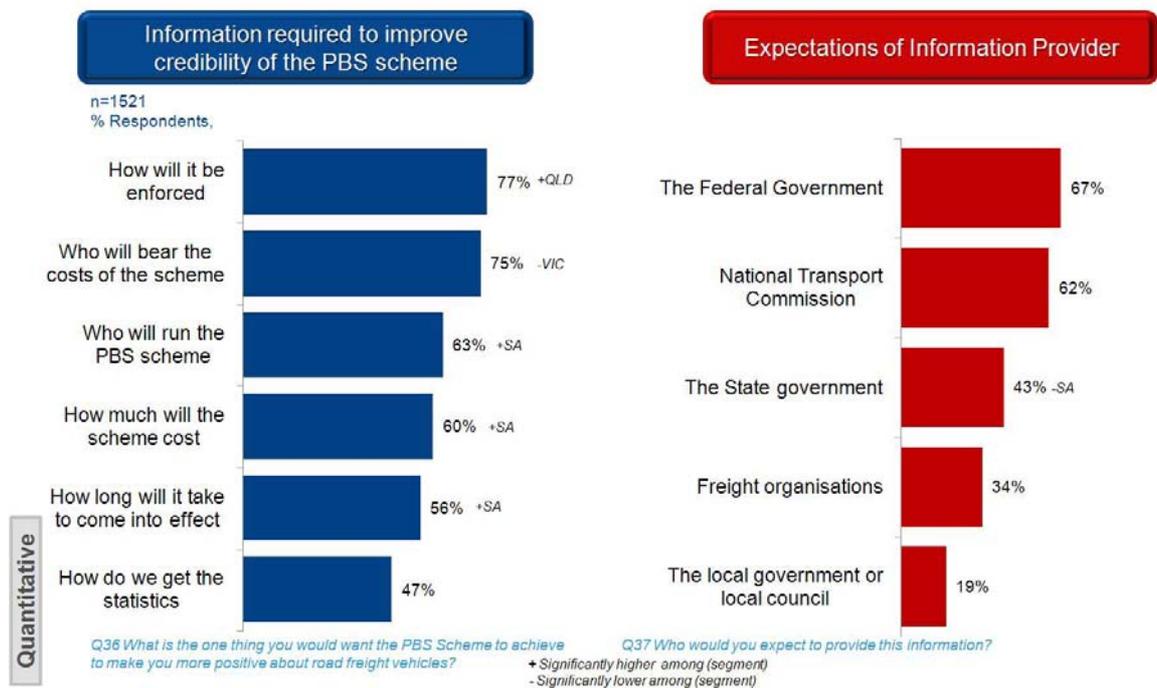
Q28 Please explain why you provided that rating.

## 6.6 The biggest concern is still driver behavior, but most do believe the scheme should be implemented sooner and it will ensure safer operation of freight vehicles

Victorians were less concerned about the cost of the project and the potential for damaged roads and bridges.



## 6.7 The scheme is expected to be enforced but question is who will bear the costs?



## 6.8 Driver Segment Profiles

Using a combination of attitude questions to general driving and scaled responses to driver concerns on driving with freight vehicles, the following segments were found:

- Within general public, drivers are differentiated as:
  - 32% who love to drive – it's a pleasure
  - 45% who like to drive but hate their commute – pain and pleasure
  - 23% who hate to drive – pure pain
- Concerns with freight vehicles are on four levels:
  - 24% have least concerns – unconcerned
  - 35% have some concerns but are not overly concerned
  - 25% are more concerned than the previous two groups
  - 17% are in the most concerned group

There is no direct or quantifiable connection between driver enjoyment and concerns with freight vehicles. There is however a connection between general driving concerns and reaction to the PBS concept.

## 6.9 Connecting Driver Profiles and Reaction to PBS

Reaction to the PBS concept varies with level of concern with freight vehicles generally.

- 12% are generally very concerned and strongly agree with all statements regarding PBS.
  - The worriers who see PBS as a solution.
- 44% are concerned and agree with most statements regarding PBS.
  - The concerned but not obsessed who welcome PBS as a possible solution.
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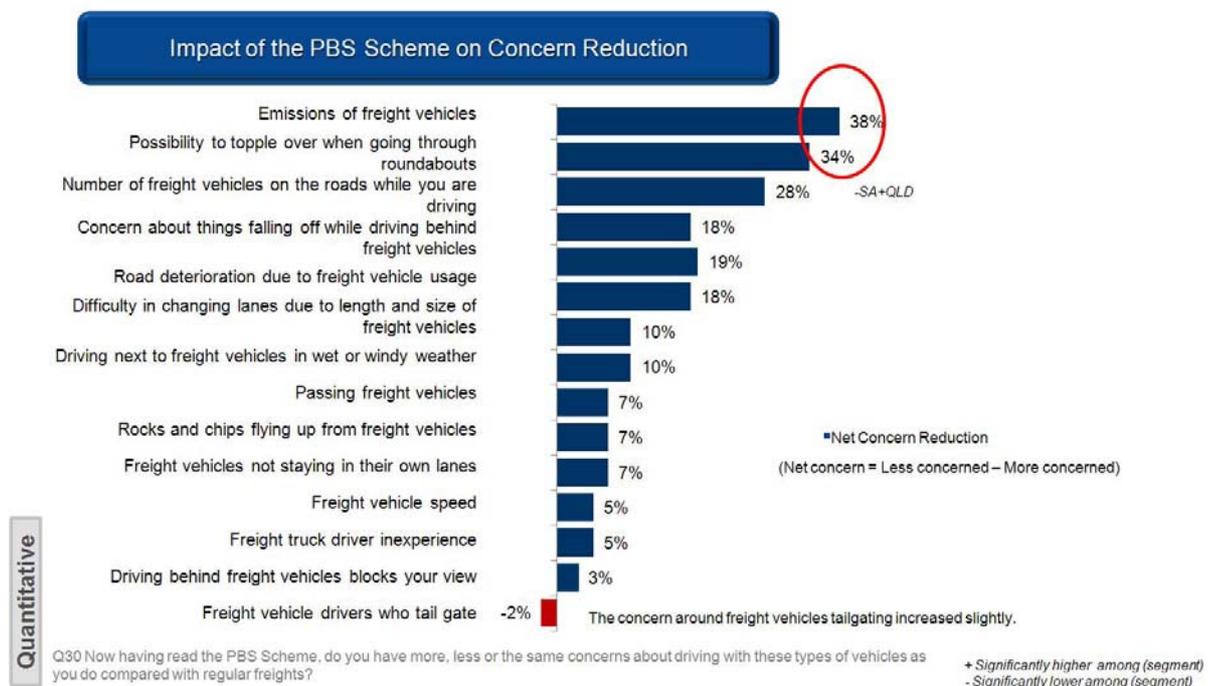


## 6.10 The Main Issues for PBS

Regardless of status on concerns and reaction to PBS, there are three responses for which agreement is high and very consistent. These statements are:

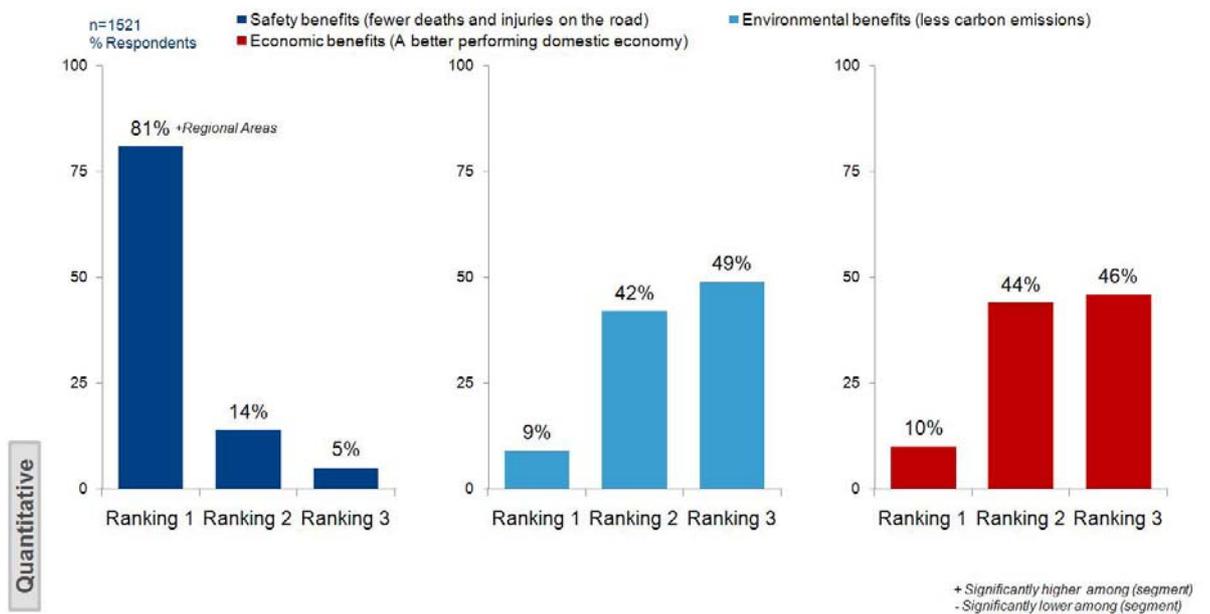
- “The cost of the project will be passed down to consumers.”
- “These PBS vehicles will still damage roads and bridges.”
- “It is not about the truck but the drivers behaviour.”

## 6.11 The PBS Scheme has had an impact on the majority of concerns, with a major effect on emissions and trucks toppling at roundabouts.

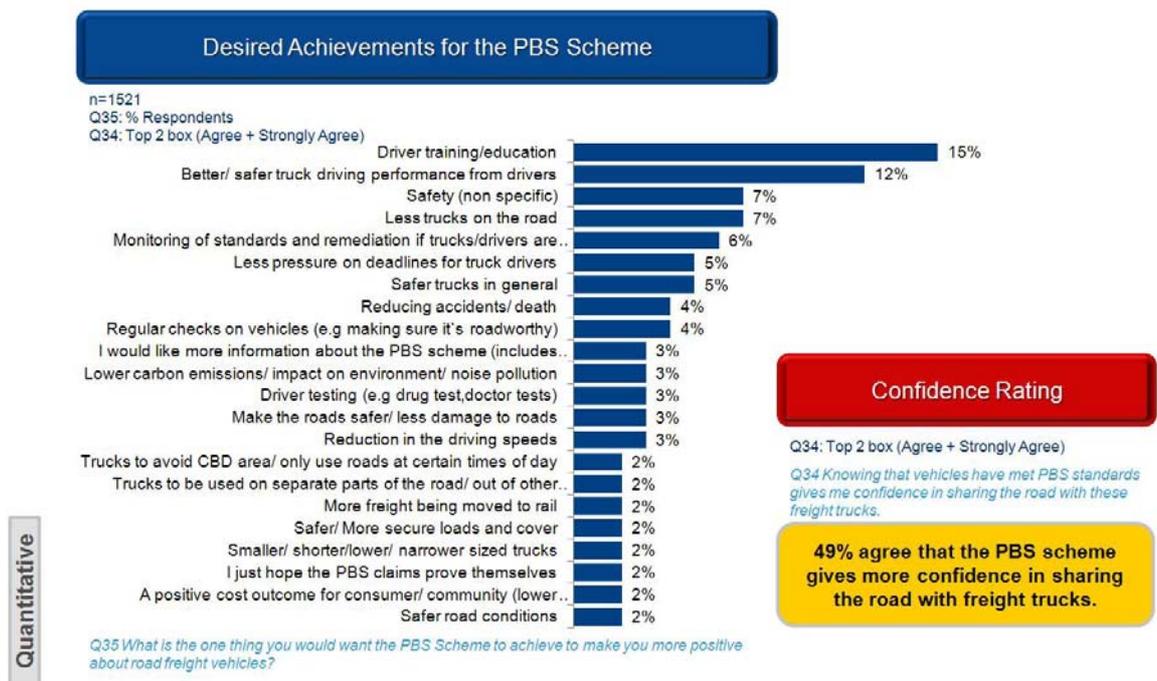


## 6.12 The safety benefits of the PBS Scheme were most important, with economic and environmental benefits ranked closely

Safety benefits were particularly important in Regional Areas.



## 6.13 Driver training, and safer driver performance are desired achievements that would encourage more positive perceptions of freight vehicles, both outside PBS goals



## 7. Reactions to Images of PBS vehicles

### 7.1 Reaction to Images of PBS and Non PBS freight vehicles

While many respondents felt they could not see any visual differences in the PBS vehicles, the few mentioned differences included:

- Wider gap between the semi-trailers on B-doubles = Increased turning ability.
- Stronger and heavier looking vehicles

NTC should consider 'badging' vehicles that are PBS compliant to both further communicate the PBS scheme to the public but also act as a visual reassurance to drivers and increase support for the PBS scheme.

*"They don't really look any different from noncompliant vehicles, how do you know the difference?"*

*"They look new which makes them look impressive. But they need a signing stating they are SMART vehicles."*

*"This one looks like it has a longer gap between the trailers, that would make it turn easily."*

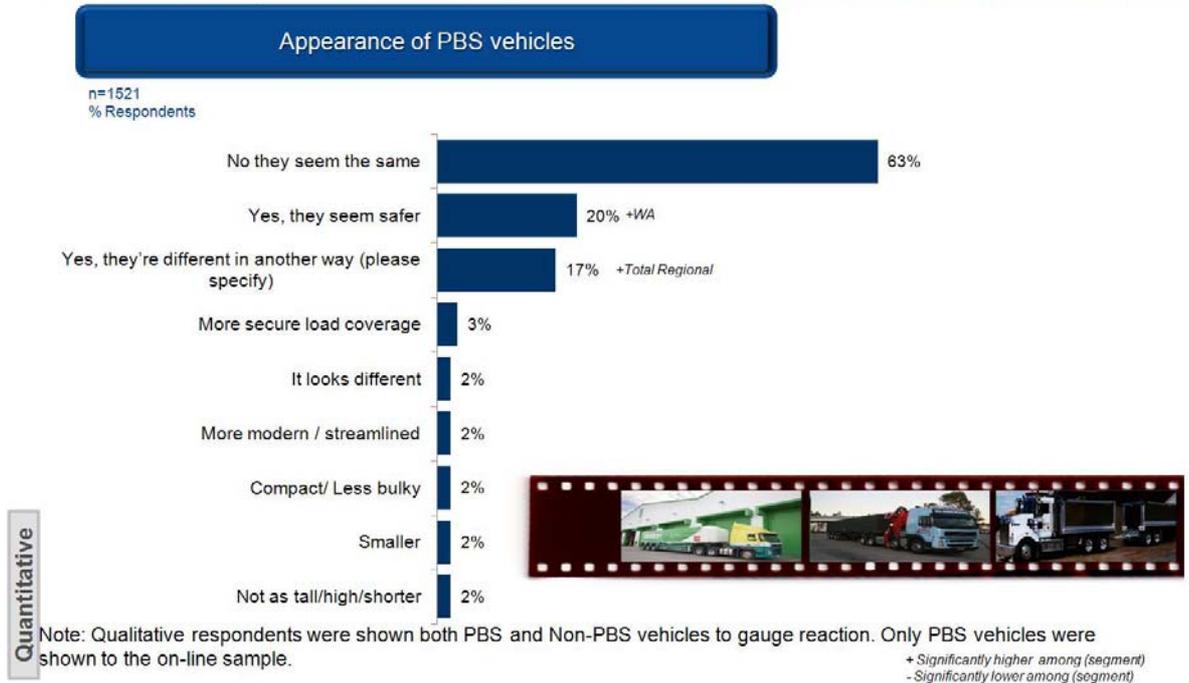


Note: Qualitative respondents were shown both PBS and Non-PBS vehicles to gauge reaction. Only PBS vehicles were shown to the on-line sample.

## 7.2 For most, the PBS trucks appear the same, but for 1 in 5 drivers they seem safer

More South Australians perceive PBS trucks as safer.

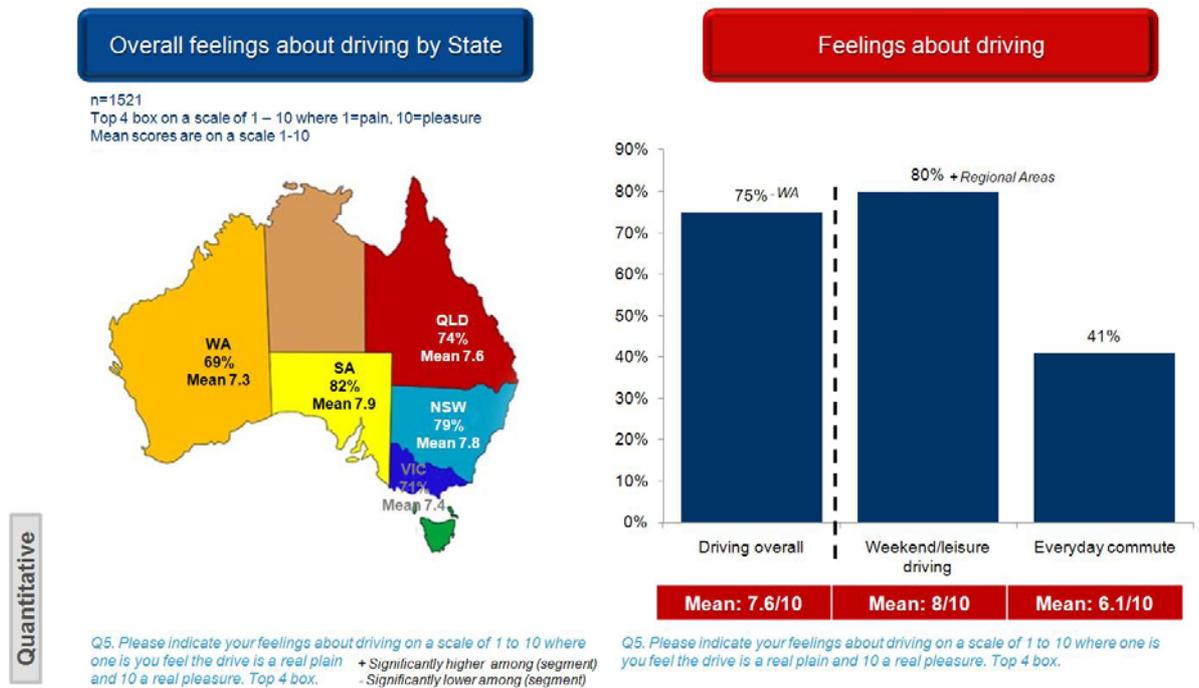
Q32 Do these vehicles appear any different to the ones you see on the road now?



## 11. Appendix A - Additional Data

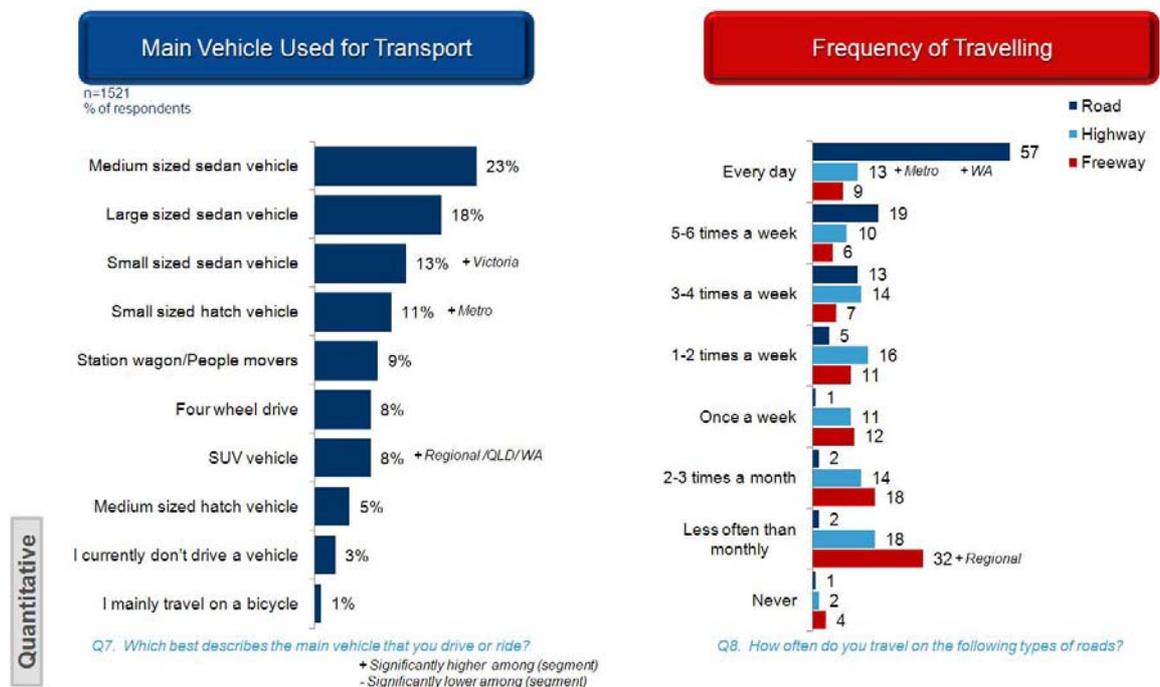
### 11.1 Weekend driving is more enjoyable, especially in regional areas.

SA residents rate driving higher on the pleasure scale and WA residents the lowest.

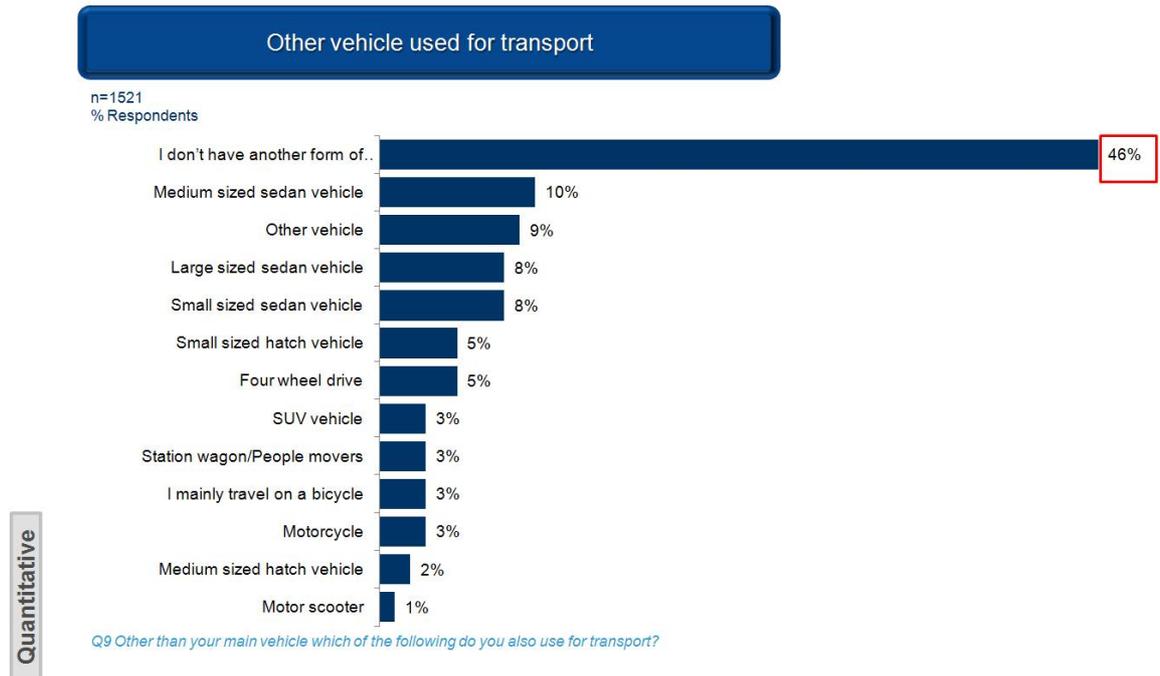


## 11.2 Medium and large sized sedans are used by 4 out of 10 respondents. More than half travel on general roads on a daily basis

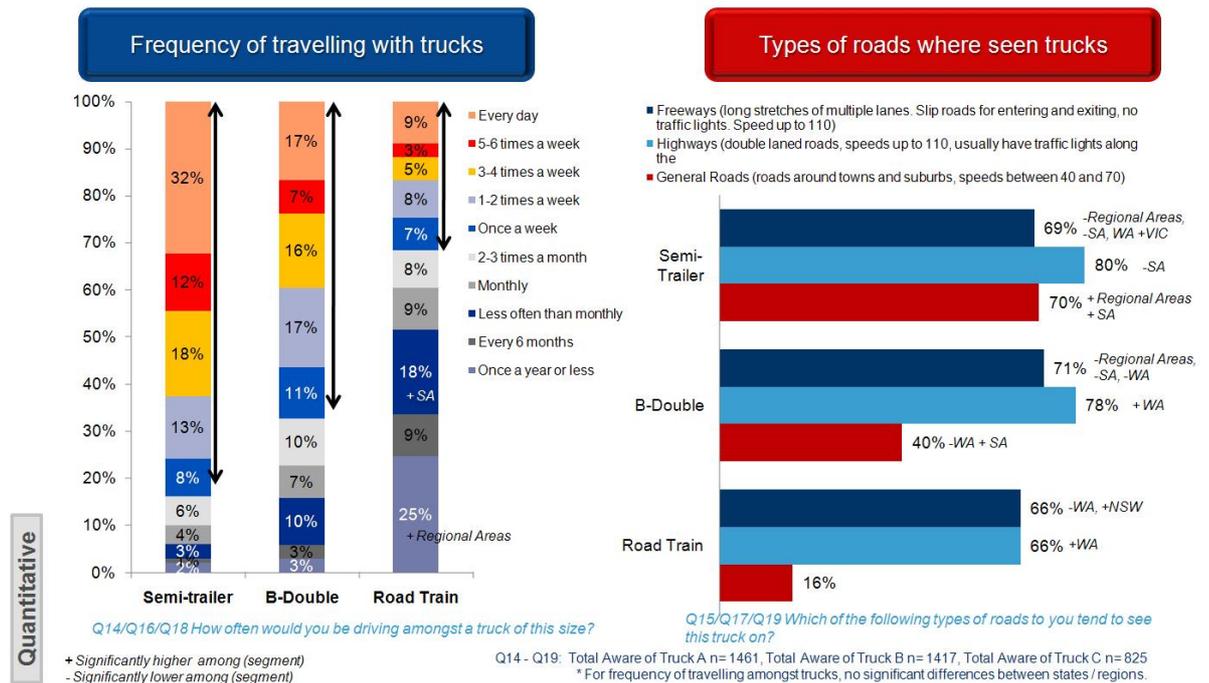
In metro areas and in WA, people are more likely to take the highways on a daily basis.



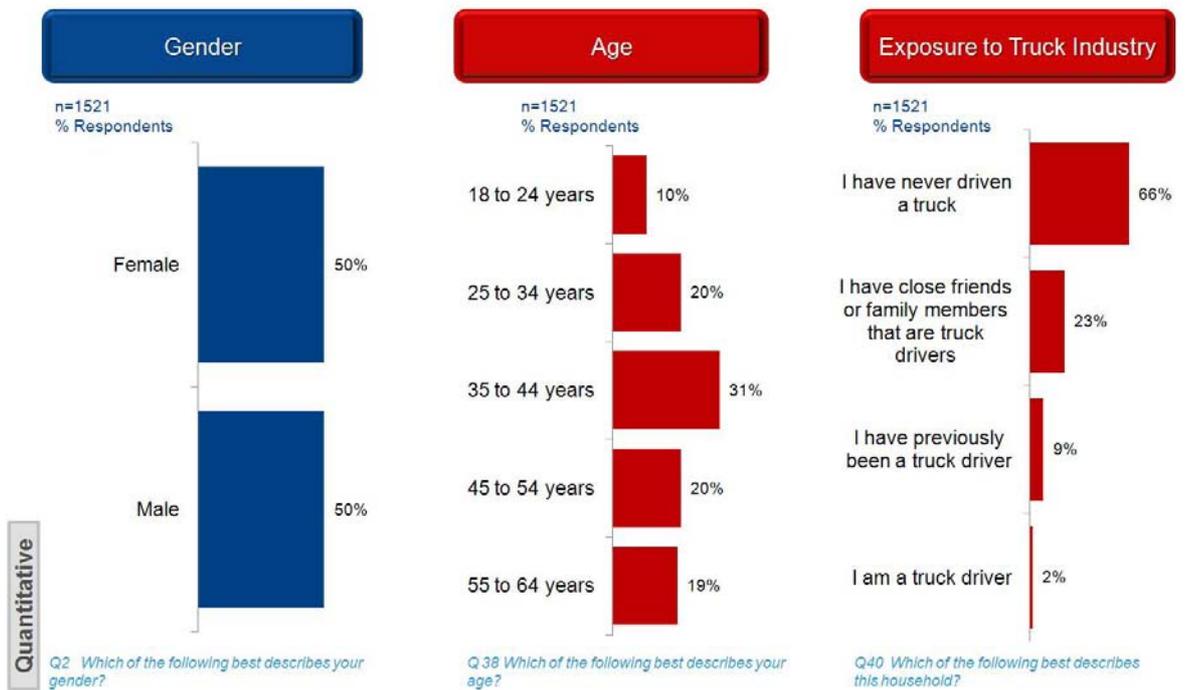
## 11.3 Most drivers only use one main vehicle.



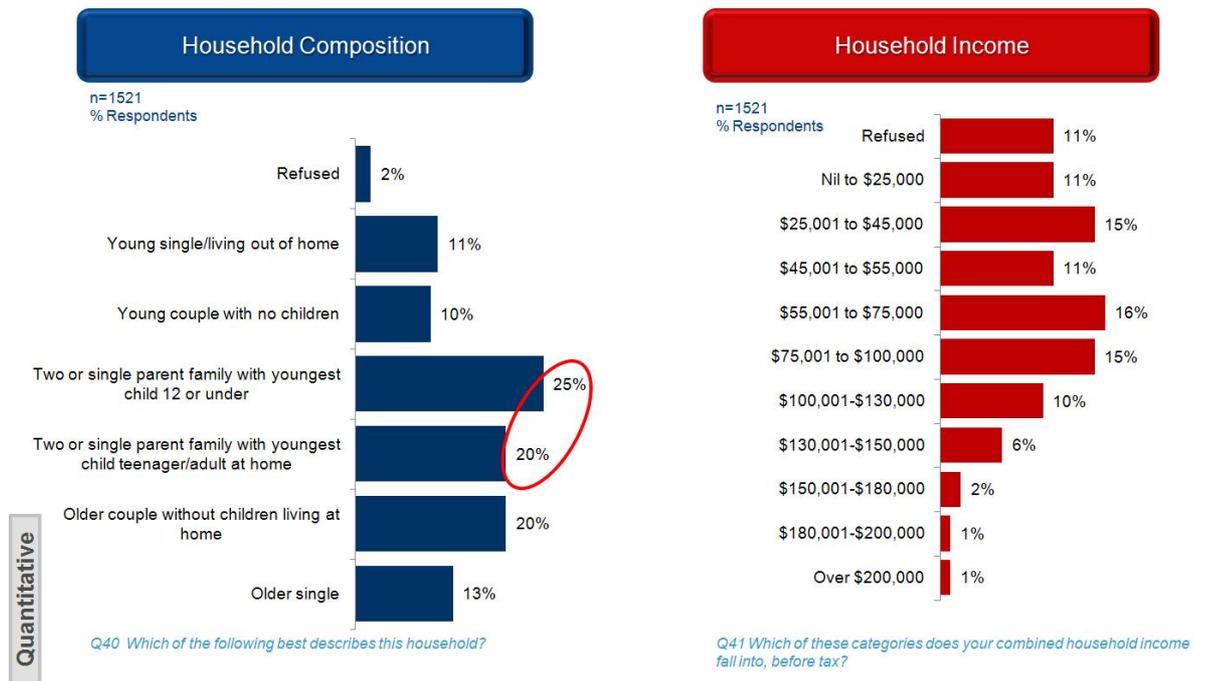
## 11.4 Semi-trailers are seen most frequently, with the majority of drivers seeing them weekly. Road trains are seen least frequently, and far less on general roads



**11.5 The sample was evenly split between males and females, and 7 in 10 people were 35+ in age.**



**11.6 Almost half the sample had children, and the majority of them had a household income of under \$100,000 per year.**





synovate

Research reinvented