

Performance Based Standards

Australia's PBS fleet

A joint report by the NHVR and ARTSA
May 2018



FORWARD

This report explains the uptake of Performance Based Standards (PBS) vehicles in Australia, and how this scheme now has a significant influence on purchasing decisions for heavy duty vehicles (with a rating equal to or greater than 12tonnes) in this country.

For the past decade the Performance Based Standards scheme has offered heavy vehicle operators the potential to achieve greater productivity and improved safety through innovative and optimised vehicle design.

That fact that almost one-in-six vehicles manufactured in 2017 was PBS approved shows how Australia's heavy vehicle operators have embraced these new technologies and designs.

The benefits of more PBS vehicles on the road have recently been quantified. According to the National Transport Commission (NTC), PBS vehicles are involved in 46 per cent fewer crashes than conventional vehicles. They are designed and built for a specific freight task, approved to operate on specific road networks and use the latest technologies and systems. Some 7000 PBS combinations have been approved during the past 10 years.

As with all significant heavy vehicle safety and productivity programs, on-going assessment and review is needed to ensure the programs will meet community and industry expectations into the future. A review of PBS is currently being conducted by the NTC, with their findings and recommendations due out around mid-2018.

To celebrate the first decade of PBS, ARTSA and the NHVR have prepared these statistics, matching data from the NHVR with the heavy vehicle data from the ARTSA Data collection, to present this report.

We thank Australia's heavy vehicle industry and its operators for their support of the PBS scheme over its first decade, and look forward to working together to make it even more successful in the future.

Signed



Sal Petrocchio

CEO

National Heavy Vehicle Regulator



Signed



Dr Peter Hart

Chairman

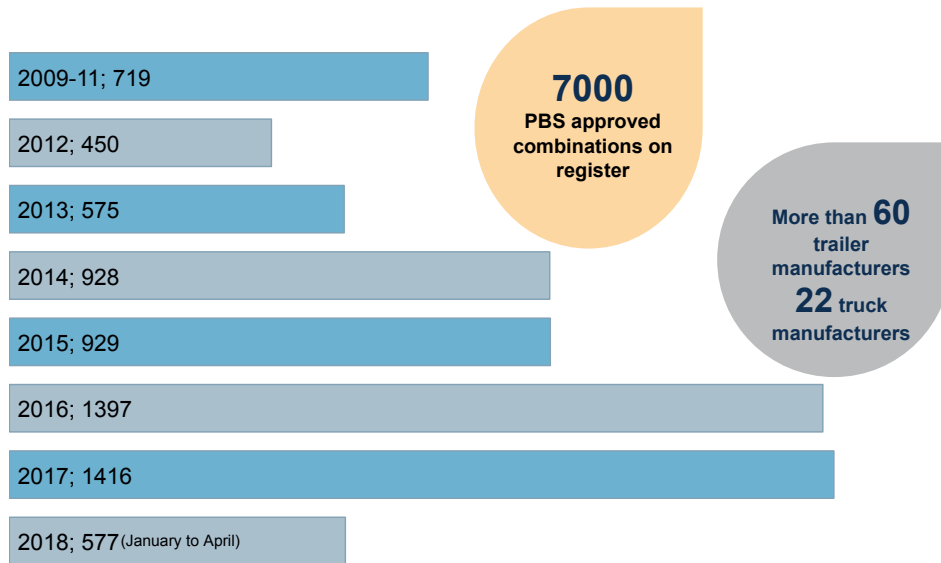
Australian Road Transport Suppliers Association



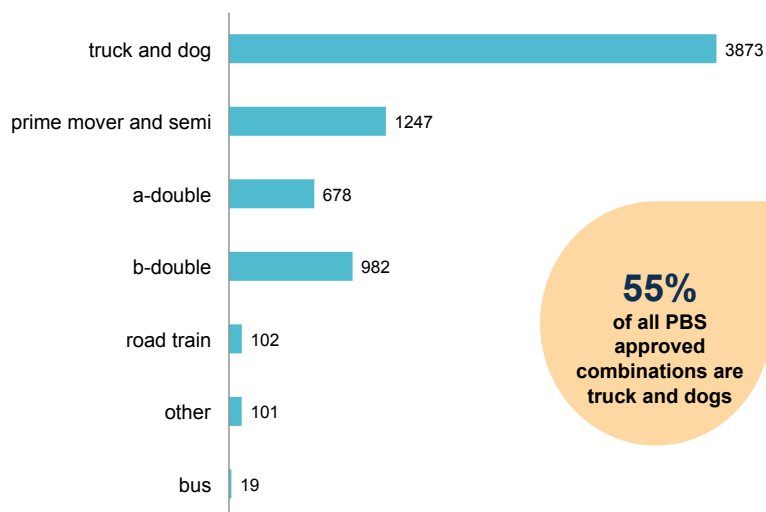
PBS COMBINATIONS

There are around 16,000 separate PBS registered trucks, trailers and buses, which make up some 7000 PBS approved combinations. Around 60 trailer manufacturers and 20 truck manufacturers have provided PBS approved equipment since the inception of PBS. Growth of PBS combinations has been strong since 2016 with typically 1400 combinations being registered during 2016 and 2017 calendar years. In the first four months of 2018 almost 600 combinations have been registered. 55% of all PBS combinations are truck and dogs.

PBS Combinations



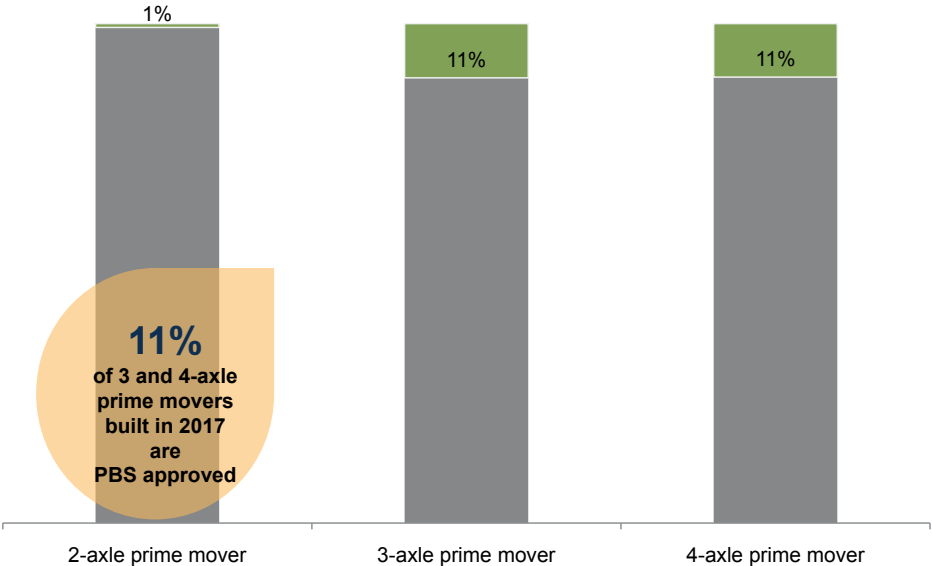
Australian PBS Fleet



PRIME MOVERS

There are just over 100,000 heavy prime movers registered in Australia. Each year around 6000 new heavy prime movers join the fleet and in 2017 some 11% of these were approved under PBS. The majority of these were 3- and 4-axle prime movers.

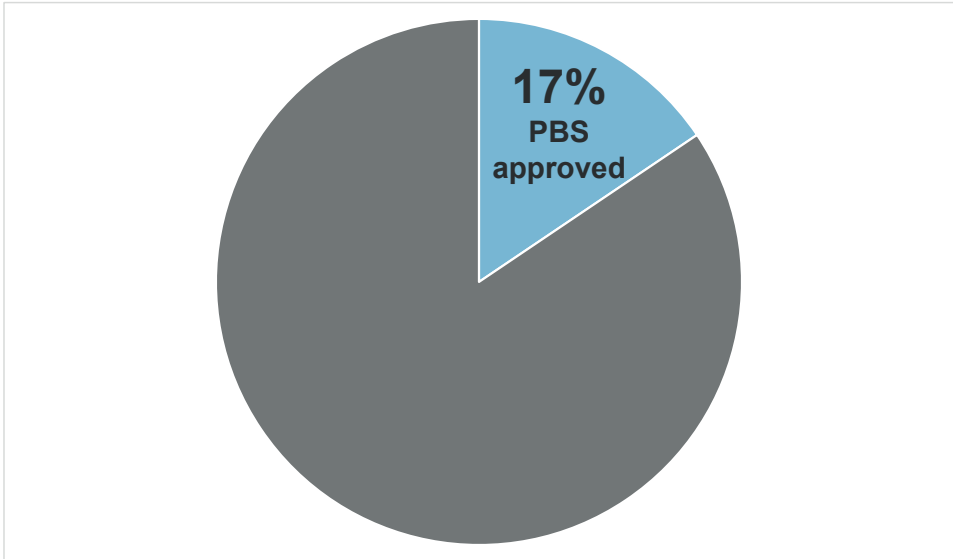
PBS Prime Movers Manufactured 2017



MARKET SHARE 2017

PBS vehicles made up 17% of the heavy vehicle market (with a rating equal to or greater than 12tonnes) in 2017.

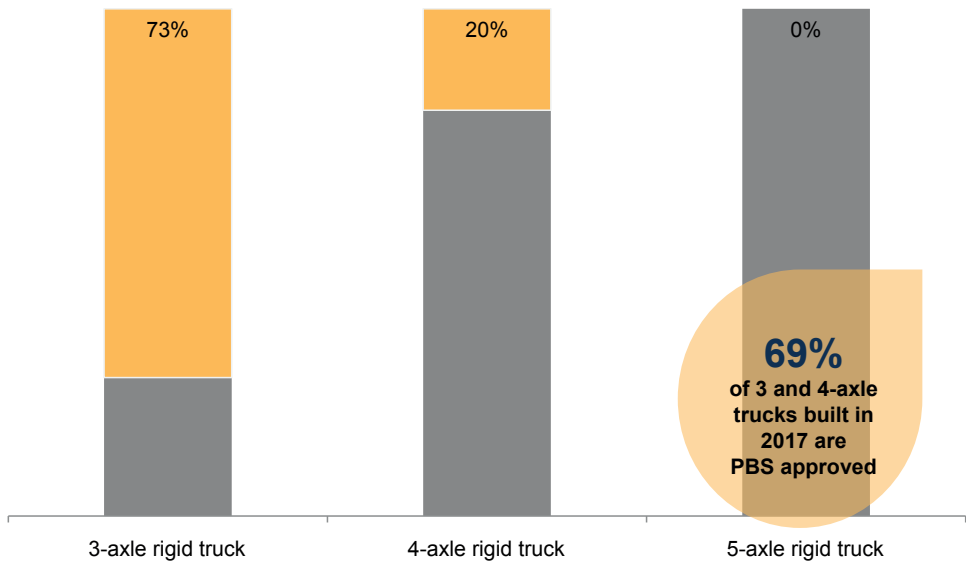
Vehicles Manufactured 2017



RIGID TRUCKS

There are around 185,000 heavy rigid trucks registered in Australia. Each year around 8000 new heavy rigid trucks join the fleet and in 2017 some 69% of 3- and 4-axle rigid trucks were approved under PBS. 73% of the three axle rigid market was made up of PBS approved units.

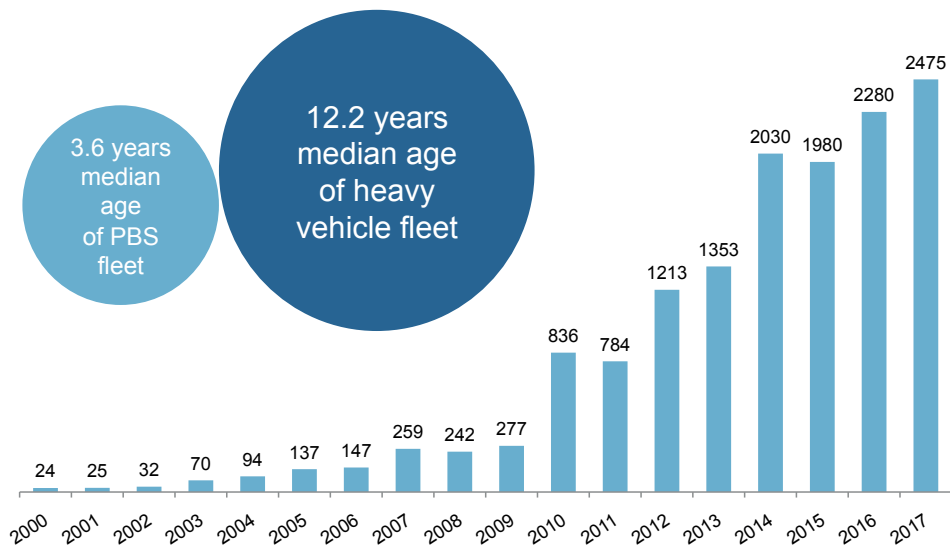
PBS Rigid Trucks Manufactured 2017



AGE OF PBS FLEET

PBS vehicles have a median age of just under 4 years, compared with over 12 years for the entire heavy vehicle fleet. This younger PBS fleet has considerable advantages in terms of better safety equipment and fewer maintenance demands compared with older vehicles.

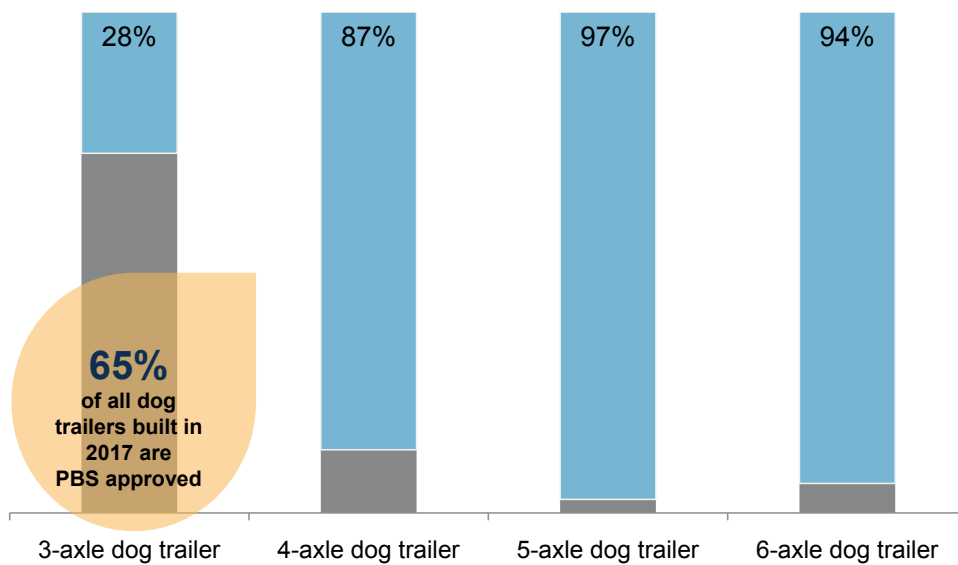
Year of Manufacture PBS fleet



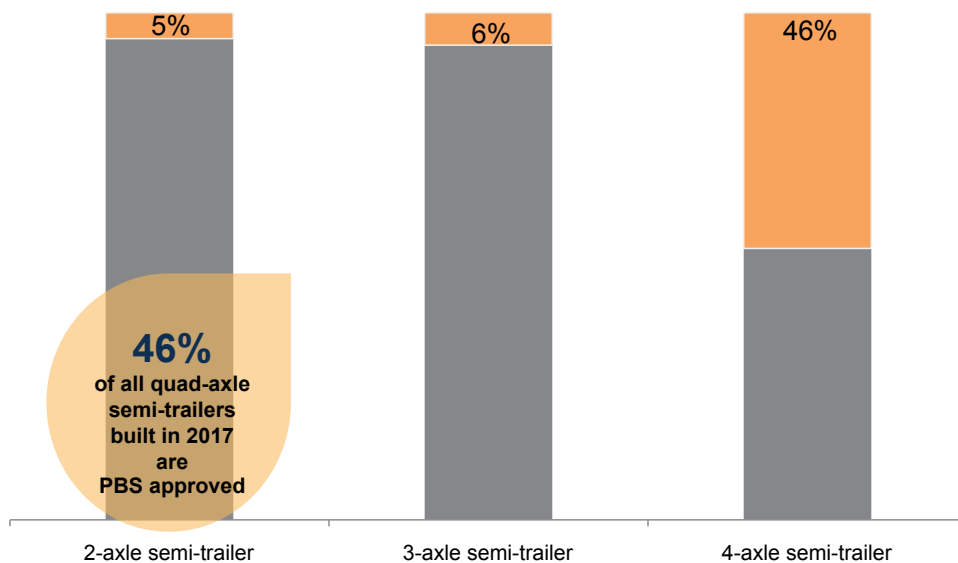
TRAILERS

The PBS market for trailers can be split between the dog market and the semi and multi combination market. There are around 20,000 dog trailers, 160,000 semi trailers and some 50,000 lead and dolly trailers currently registered in Australia. Each year new equipment is typically 1200 dog trailers, 7000 semi-trailers and some 2700 lead and dolly trailers. The PBS share of the dog trailer market is substantial at around 65%. The conventional trailer share is smaller at under 10%.

PBS Truck and Dogs Manufactured 2017



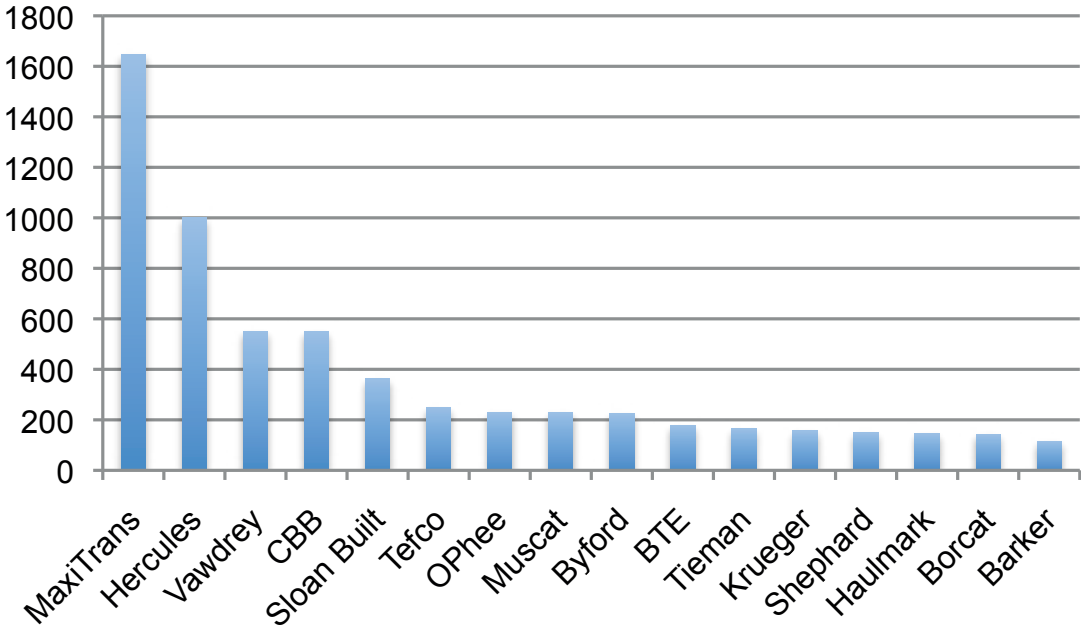
PBS Semi-trailers Manufactured 2017



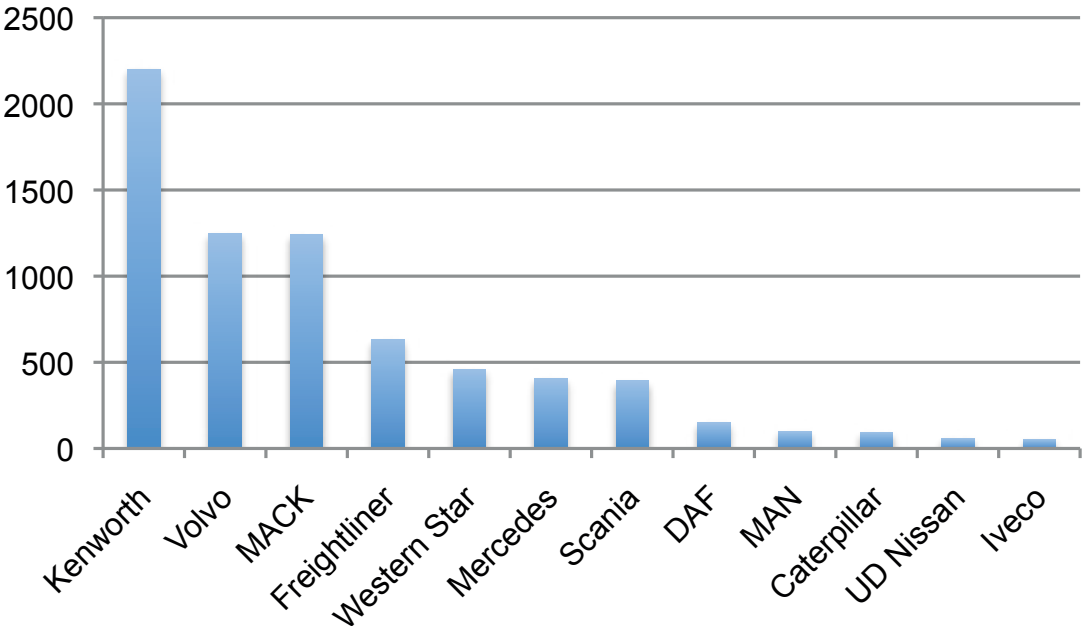
MANUFACTURERS

With around 16,000 PBS approved units (noting that a truck and dog is two separately registered units – the truck and the dog) on the road, there are around 80 companies that are involved in the PBS market. The lead manufacturers tend to mirror the leaders in the overall market, with the top 5 or 6 generally accounting for 70 to 80% of all PBS equipment.

LEADING TRAILER MANUFACTURERS



LEADING TRUCK MANUFACTURERS



PBS OVERVIEW

The Performance Based Standards (PBS) scheme is a world-leading program that allows Australia's heavy vehicle industry to match the right vehicles to the right tasks. The scheme gives industry the opportunity to innovate with vehicle design to improve productivity for a given freight task, achieve safer performance and make the least possible impacts on road infrastructure.

PBS vehicles are designed to perform their tasks as productively, safely and sustainably as possible, and to operate on networks that are appropriate for their level of performance. The PBS scheme is all about stretching the boundaries of heavy vehicle design and innovation by testing what's possible and what's not.

ARTSA and the NHVR believe that if a vehicle has been assessed against the strict PBS scheme safety and infrastructure standards and there is evidence that it passes all of them, it should be allowed to operate on the road, subject to road manager consent and individual route assessment if required.

The National Transport Commission (NTC) implemented the current PBS scheme in 2007. Now 10 years later, the benefits can be fully measured. It shows that the scheme is delivering an opportunity to unlock productivity gains and improve safety outcomes. With the road freight task predicted to double from 2006 levels by 2030, PBS will be required to facilitate this growth in the safest, most productive and efficient manner possible.

THE FUTURE

The success of the PBS scheme over the past decade is a clear statement of the Australian heavy vehicle industry's desire to innovate and be smarter.

ARTSA and the NHVR want to see further barriers removed that potentially limit this innovation to ensure future generations of PBS vehicles are safer, cleaner and even more productive. ARTSA and the NHVR believe that the current scheme framework can be improved and to ensure future growth. Both organisations fully support a current NTC review of the scheme to ensure the next 10 years of the PBS story are as successful as the past decade.

MORE INFORMATION

Go to:

National Transport Commission

<https://www.ntc.gov.au>

National Heavy Vehicle Regulator

<https://www.nhvr.gov.au>

Australian Road Transport Suppliers Association

<http://www.artsa.com.au>

