

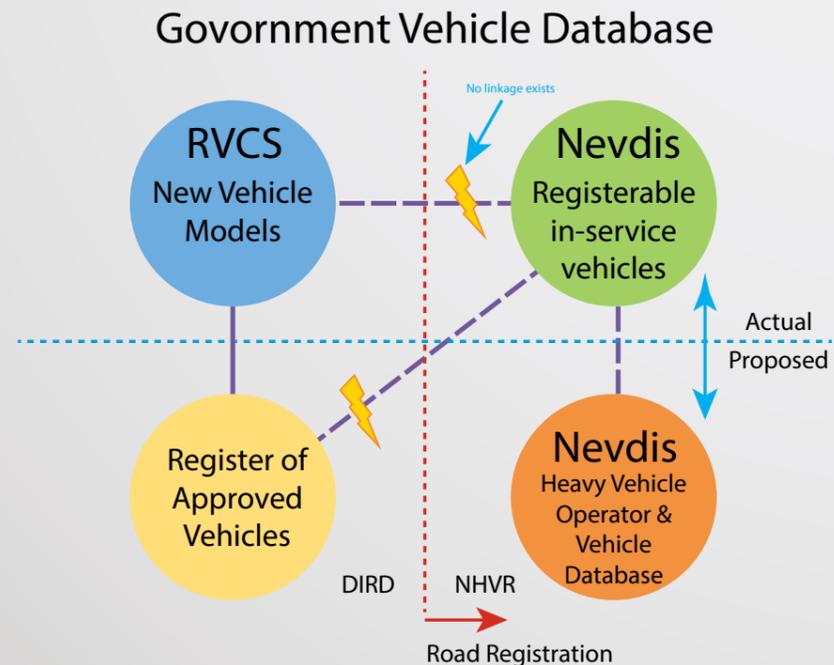


Does age matter? ARTSA's analysis of the heavy vehicle fleet

The Australian Road Transport Suppliers' Association (ARTSA) has been analysing the Australian heavy- and medium-duty vehicle fleet for the past five years using raw data we obtain from the National Exchange of Vehicle and Driver Information System (NEVDIS). This article presents my assessment of trends that affected the fleet and the size of the market in 2017 – but first, some suggestions that would improve the heavy vehicle logistics industry's knowledge of itself. Registered road vehicles have their Vehicle Identification Numbers (VINs) and other descriptive information recorded in NEVDIS. The vehicle information initially comes from vehicle manufacturers, state road agencies and the imports group within the Department of Infrastructure and Regional Development (DIRD). When a vehicle is registered, either at a registry or by a licenced motor car trader, additional information about the actual vehicle – its body type, registration code, colour, engine, ratings – is added into NEVDIS. Unfortunately, the quality of this added information is variable. Whilst there are more than 30 data fields that describe each vehicle, only six are reliable for medium- and heavy-duty vehicles because they are essential for registration and charging. As government agencies do not make use of most of the data fields in NEVDIS, there has been no imperative

to make this additional data accurate or consistent. ARTSA is interpreting and correcting another six data fields so that it can produce useful reports that can inform our industry about the characteristics of the medium- and heavy-duty vehicle fleet. In total, there are four government databases relevant to heavy vehicles that either exist or are proposed, identified in Figure 1. The Road Vehicle Certification System (RVCS) concerns approvals for new vehicles that are supplied to the market. DIRD is also proposing to establish a Register of Approved Vehicles (RAV), which can be searched to show

the approval history of an individual road vehicle. The NHVR is currently considering the establishment of a heavy vehicle database that will attempt to connect operator information with vehicle information. I expect that the vehicle information for the NHVR database will come from NEVDIS. ARTSA has been informing government that the new-vehicle information should be added to the in-service databases. An accurate in-service database is important because it could inform our industry about important aspects that are not being focused on by government – for example body type, fleet capacity and

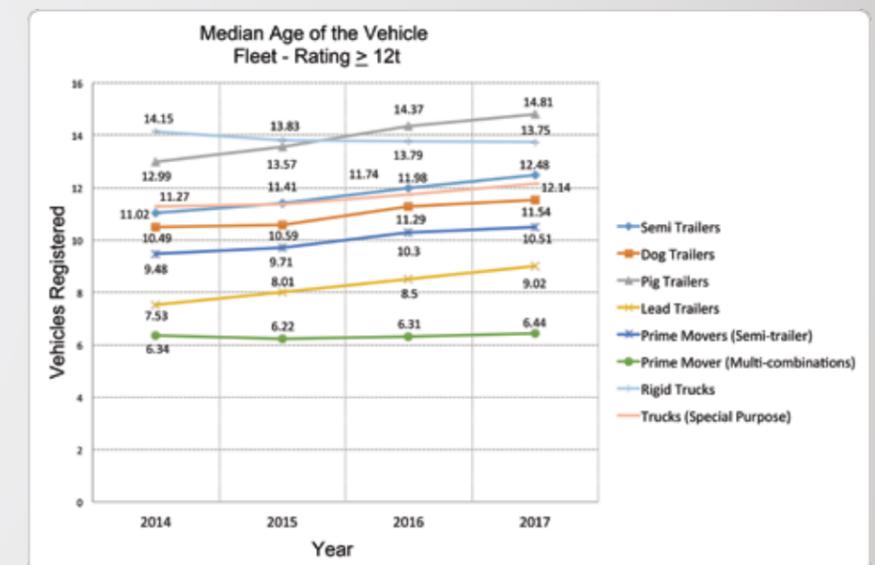
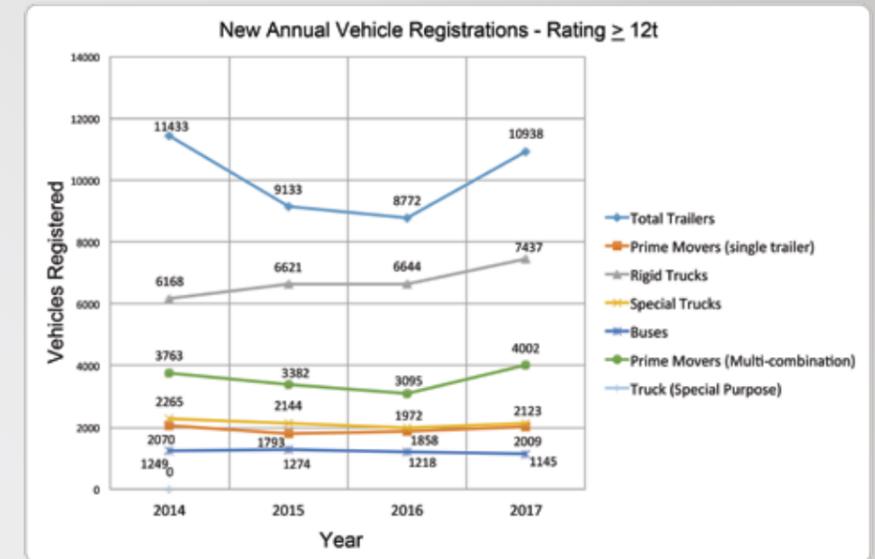


safety technology uptake. So what happened to the medium- and heavy-duty market in 2017? Graph 1 shows total new registrations for the main heavy-duty vehicle categories. Note that the vehicle rating > 12t is for heavy-duty vehicles. ARTSA also has the data for > 4.5t to < 12t, which covers medium-duty vehicles.

The market has been recovering in 2017 after declining or static levels in 2015 and 2016. This trend is particularly evident for trailers and multi-combination prime-movers. The bus market and the machines markets are static.

A notable achievement is that the multi-combination prime mover market is now twice the size of the single-trailer prime-mover market. This is the result of 27 years of regulatory reform that has allowed growing access to main roads by multi-combinations. Note that the ARTSA data presented here shows actual registrations and does not include trucks that have been manufactured or are under construction but not registered. ARTSA has data on work-in-progress VINs but it is not included.

The heavy-duty rigid truck market has grown steadily over the past four years; it did not show the dip that the prime-mover market experienced. This probably indicates the growth in the local freight delivery sector. The special-purpose truck market (which includes rigid trucks) is much smaller than the freight sector – less than five per cent. Together, the rigid truck market is significantly bigger than the prime mover market. The trucks are predominantly made in Japan, although the great majority of them have a body type that was made in Australia. Graph 2 shows the median age of the fleet. Median age is the age at which there are equal numbers of new and old vehicles. The only category in which Australia has a static median age is multi-combination prime movers – all other categories are getting steadily older. The multi-combination prime mover category is the only one that has vehicles transitioning into another category – into the single prime mover category.



The median age of categories that are not associated with multi-combinations is greater than 10 years. Remember that median age has equal numbers of older and younger vehicles – this has two very significant implications. First, driver safety technologies that have been introduced over the past 10 years only exist on a minority of the fleet. Driver comfort levels are probably better in newer rather than older vehicles. Second, the maintenance demands of the fleet creep up. I acknowledge that maintenance requirements depend upon usage, and it is likely that the older vehicles in the fleet don't work as hard

as the younger vehicles, but necessary maintenance also depends upon age because parts break and long-service items wear out. It is getting harder to maintain the Australian fleet. Newsflash: ARTSA will be hosting the 2018 Global Leader's Summit at the Melbourne Convention Centre on 8–9 May 2018. This world-class meeting will focus on innovation and disruption trends in road-vehicle logistics. Put it in your diary.

Dr Peter Hart
Chairman
ARTSA