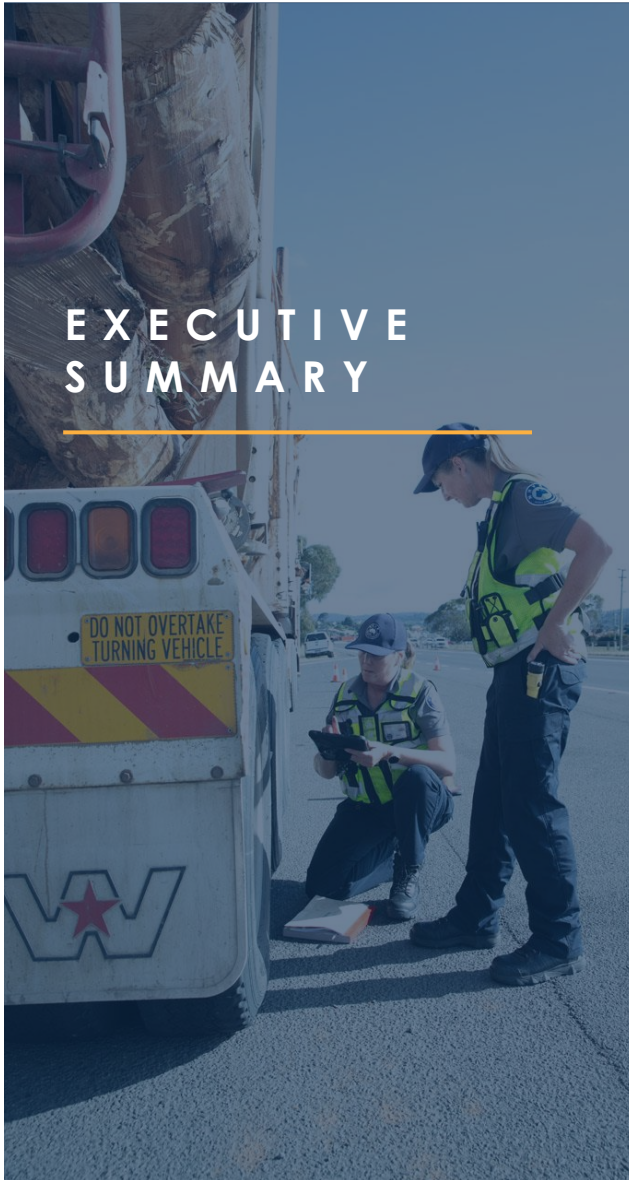


NATIONAL ROADWORTHINESS SURVEY 2024

A health check of Australia's
heavy vehicle fleet
Rigid trucks

MAY
2025





EXECUTIVE SUMMARY

RIGID TRUCK INSPECTIONS

Overall, in the NHVR Roadworthiness Survey, **3,975 rigid trucks and combinations** were inspected, containing a total of **4,488 units**.

The majority of rigid trucks were intercepted in the same jurisdiction to which they were registered.

The average age of rigid trucks on Australian roads is **10.9 years**, with a median mileage of just **over 290,000 km**.

OVERVIEW OF NON-CONFORMITIES

39% of rigid truck units inspected had **at least one non-conformity**, which is stable with 38% in 2021. The incidence of non-conformity remains well below 2016 levels.

The majority of non-conformities were given at most a **minor defect notice** (i.e. the continued use of the vehicle on road poses a safety risk, but the risk is not deemed as imminent or serious). The highest level of non-conformity was minor for **26% of units**.

There has been a slight increase in the incidence of highest level of non-conformity being a **self-clearing defect** from 7% to 9%. 'Self-clearing' refers to a non-conformity where the use of the vehicle on road does not pose a safety risk.

Overall, **70% of rigid trucks passed inspection** (i.e. the highest level of non-conformity was a self-clearing defect or the unit had no defect). This remains stable from 69% in 2021.

Non-conformity **did not differ greatly** between rigid trucks inspected in their state of registration and those inspected interstate (40% and 36%, respectively).

AREAS OF NON-CONFORMITY

The **most common non-conformity among rigid trucks** overall and for metro locations is **lights and reflectors**, while **brakes** was the most common non-conformity in regional areas. **Structure & body** was also in the top 3 most common in both metro and regional locations.

Non-conformity has remained consistent across most areas, except for **structure and body, seats and seatbelts and engine driveline and exhaust** which have increased.

NON-CONFORMITY BY JURISDICTION

Incidence of non-conformity in rigid truck units has **decreased** in Queensland (QLD), South Australia (SA), Tasmania (TAS) and the Australian Capital Territory (ACT) since 2021.

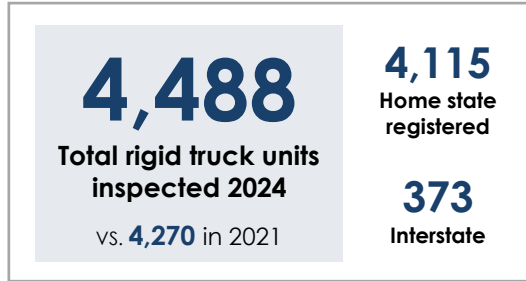
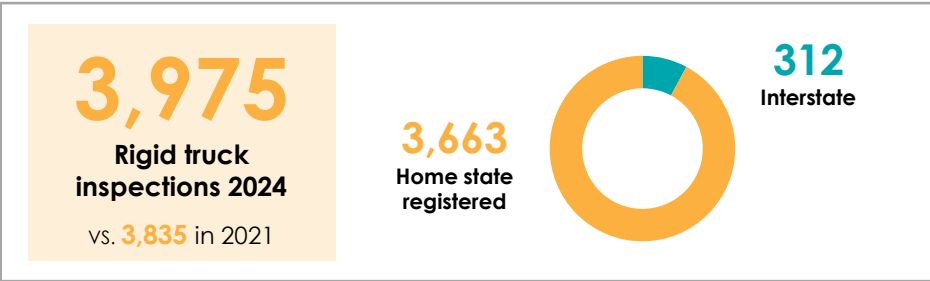
The highest incidence of non-conformity now occurs in Victoria (VIC) (48%), having increased significantly in both metro and regional VIC since 2021.

The incidence of non-conformity in most jurisdictions remains below 2016 levels, except for SA which is on par.

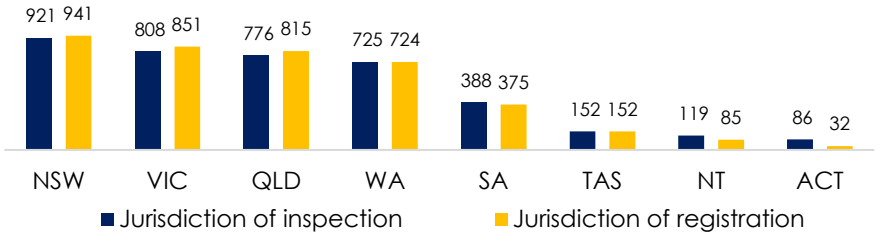


OVERVIEW — ALL RIGID TRUCK UNITS (POWERED AND TRAILERS)

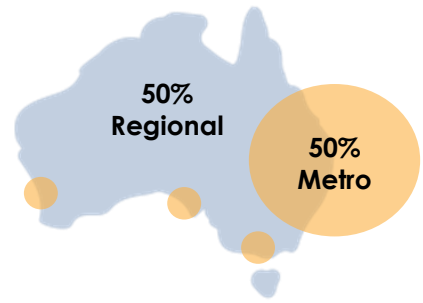
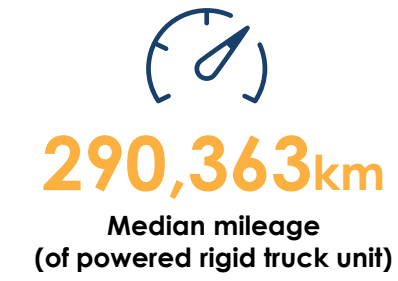
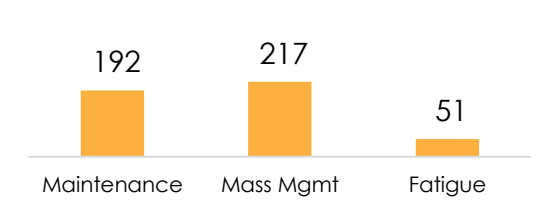
- 39% of rigid trucks inspected nationally had at least one non-conformity. This was the vehicle type with the highest rates of non-conformity.
- The majority of rigid trucks were inspected in their state of registration.



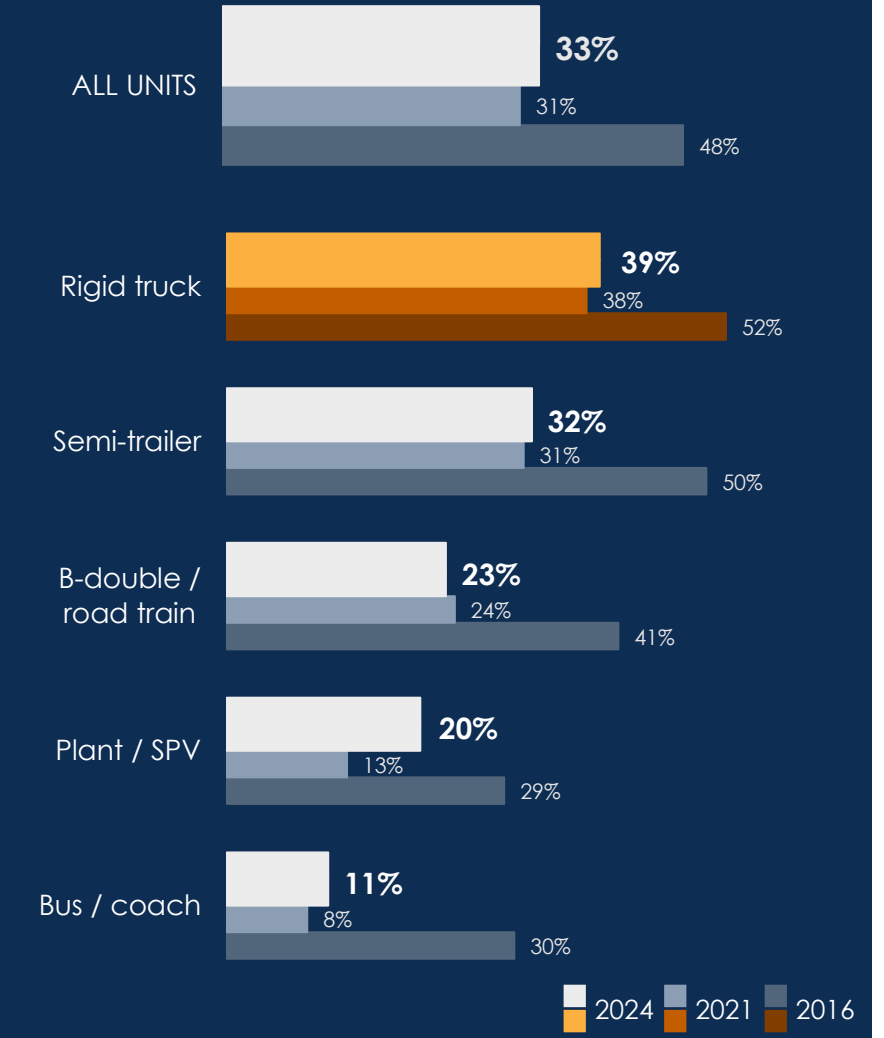
JURISDICTION



SCHEME



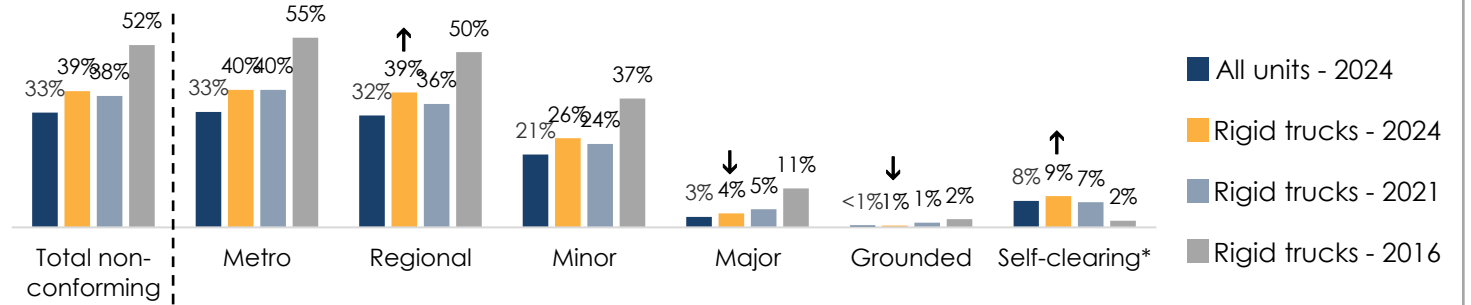
NATIONAL RATES OF NON-CONFORMITY 2024



OVERVIEW OF NON-CONFORMITIES — ALL RIGID TRUCK UNITS (POWERED AND TRAILERS)

- The incidence of non-conformity overall in rigid trucks has remained stable since 2021, having increased by 1 percentage point (from 38% to 39%). Non-conformity increased in regional inspections of rigid trucks.
- The incidence of major and grounded non-conformities has decreased, while self-clearing has increased.

39%
of rigid truck units inspected had a non-conformity
Vs. **38%** in 2021



	NON-CONFORMITIES			HIGHEST LEVEL OF NON-CONFORMITY				PASS
	Non-conforming units	Multiple non-conformities	Individual non-conformities	Self-clearing*	Minor	Major	Grounded	Unit passed [^] inspection
All units - 2024	4,054	3,668	11,563	955	2,601	438	60	11,263
% of units (n=14,362)	33%	27%		8%	21%	3%	<1%	75%
Rigid trucks - 2024	1,700	1,184	8,039	394	1,095	187	24	3,182
% of units (n=4,488)	39%	28% ↑		9% ↑	26%	4% ↓	1% ↓	70%
Rigid trucks - 2021	1,618	966	5,861	315	1,025	223	55	2,967
% of units (n=4,270)	38%	23%		7%	24%	5%	1%	69%
Rigid trucks - 2016	1,803	1,117	7,116	87	1,263	379	74	1,853
% of units (n=3,569)	52%	33%		2%	37%	11%	2%	49%
Home state inspection	1,570	1,097	7,407	359	1,008	180	23	2,904
% of units (n=4,115)	40%	28%		9%	26%	4%	1%	69%
Interstate inspection	130	87	632	35	87	7	1	278
% of units (n=373)	36%	25%		9%	25%	2%	<1%	73%

Note: Counts (n) are reported unweighted, percentages (%) are weighted.

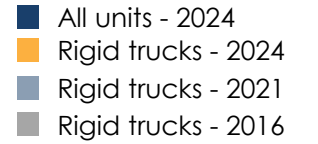
*Self-clearing defect was known as 'Formal warning' in 2016. For analysis purposes, the two have been combined and compared.

[^]A unit passes inspection if the highest level of non-conformity is self-clearing.

↑ ↓ Statistically significant increase/decrease in comparison with 2021. Absence of arrow means no statistically significant difference.

AREAS OF NON-CONFORMITY — ALL RIGID TRUCK UNITS (POWERED AND TRAILERS)

- The most common non-conformity among rigid trucks overall and for metro locations is *lights and reflectors*, while *brakes* was the most common non-conformity in regional areas.
- Most of the top areas of non-conformity in rigid trucks are slightly above the national average of all units.

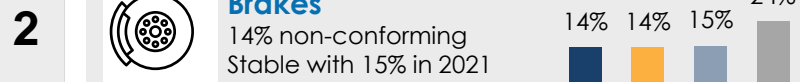


TOP 3 — TOTAL



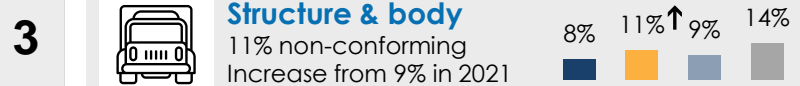
Top 3 reasons for refusal in **lights and reflectors**

- Light not operating, damaged, loose or wrong colour
- Reflectors are damaged, obscured, deteriorated, missing or in the wrong location
- Lenses or reflectors loose, damaged or wrong colour



Top 3 reasons for refusal in **brakes**

- Brake imbalance across an axle
- Incorrectly adjusted brakes
- Poor service brake performance



Top 3 reasons for refusal in **structure and body**

- Rear marking plates are faded, damaged or incorrectly fitted
- Chassis/frame damage or rust
- Fastenings between frame members, including welds, are missing, loose, distorted or cracked

TOP 3 — METRO



Top 3 reasons for refusal in **lights and reflectors**

- Light not operating, damaged, loose or wrong colour
- Reflectors are damaged, obscured, deteriorated, missing or in the wrong location
- Lenses or reflectors loose, damaged or wrong colour



Top 3 reasons for refusal in **engine, driveline and exhaust**

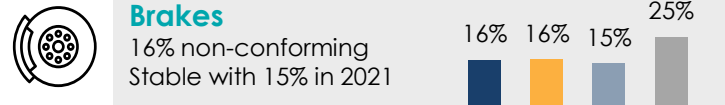
- Oil leaks
- Exhaust system leaks
- Fuel leak



Top 3 reasons for refusal in **structure and body**

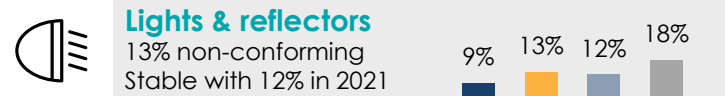
- Rear marking plates are faded, damaged or incorrectly fitted
- Chassis/frame damage or rust
- Fastenings between frame members, including welds, are missing, loose, distorted or cracked

TOP 3 — REGIONAL



Top 3 reasons for refusal in **brakes**

- Brake imbalance across an axle
- Incorrectly adjusted brakes
- Poor service brake performance



Top 3 reasons for refusal in **lights and reflectors**

- Light not operating, damaged, loose or wrong colour
- Reflectors are damaged, obscured, deteriorated, missing or in the wrong location
- Lenses or reflectors loose, damaged or wrong colour



Top 3 reasons for refusal in **structure and body**

- Rear marking plates are faded, damaged or incorrectly fitted
- Chassis/frame damage or rust
- Fastenings between frame members, including welds, are missing, loose, distorted or cracked

Note: 'Stable with' refers to a change that is not statistically significant.












'Reasons for refusal' uses the proportion of the vehicle type that has a non-conformity in that area (e.g. of units that have a non-conformity in brakes) not of all units overall.

↑↓ Statistically significant increase/decrease in comparison with 2021. Absence of arrow means no statistically significant difference.

AREAS OF NON-CONFORMITY SUMMARY — ALL RIGID TRUCK UNITS (POWERED AND TRAILERS)

- Among rigid trucks, the incidence of non-conformity in *structure & body*, *seats & seatbelts* and *engine, driveline & exhaust* has increased since 2021. All other areas have remained stable.

AREAS OF NON-CONFORMITY

	 Structure	 Seats and seatbelts	 Lights and reflectors	 Mirrors	 Windscreen & windows	 Coupling	 Trailers	 Brakes	 Steering & suspension	 Wheels and hubs	 Engine driveline & exhaust
All units - 2024	856	238	1,057	42	436	154	42	1,907	638	487	752
% of units (n=14,362)	8%	2%	10%	<1%	4%	1%	<1%	14%	6%	4%	7%
Rigid trucks - 2024	468	166	609	30	234	73	10	599	316	221	446
% of units (n=4,488)	11% ↑	4% ↑	14%	1%	6%	2%	<1%	14%	8%	5%	11% ↑
Rigid trucks - 2021	379	104	559	19	210	63	20	627	381	186	388
% of units (n=4,270)	9%	2%	13%	<1%	5%	1%	<1%	15%	8%	5%	9%
Rigid trucks - 2016	461	186	597	22	216	91	-	826	642	267	421
% of units (n=3,569)	14%	5%	18%	1%	6%	3%	-	24%	19%	8%	13%
Home state inspection	444	159	572	30	209	67	8	553	297	199	418
% of units (n=4,115)	11%	4%	15%	1%	5%	2%	<1%	14%	8%	5%	11%
Interstate inspection	24	7	37	0	25	6	2	46	19	22	28
% of units (n=373)	8%	2%	11%	0%	9%	1%	1%	13%	6%	5%	8%

Further information is available in the main report.
Contact natops@nhvr.gov.au to obtain a copy.

