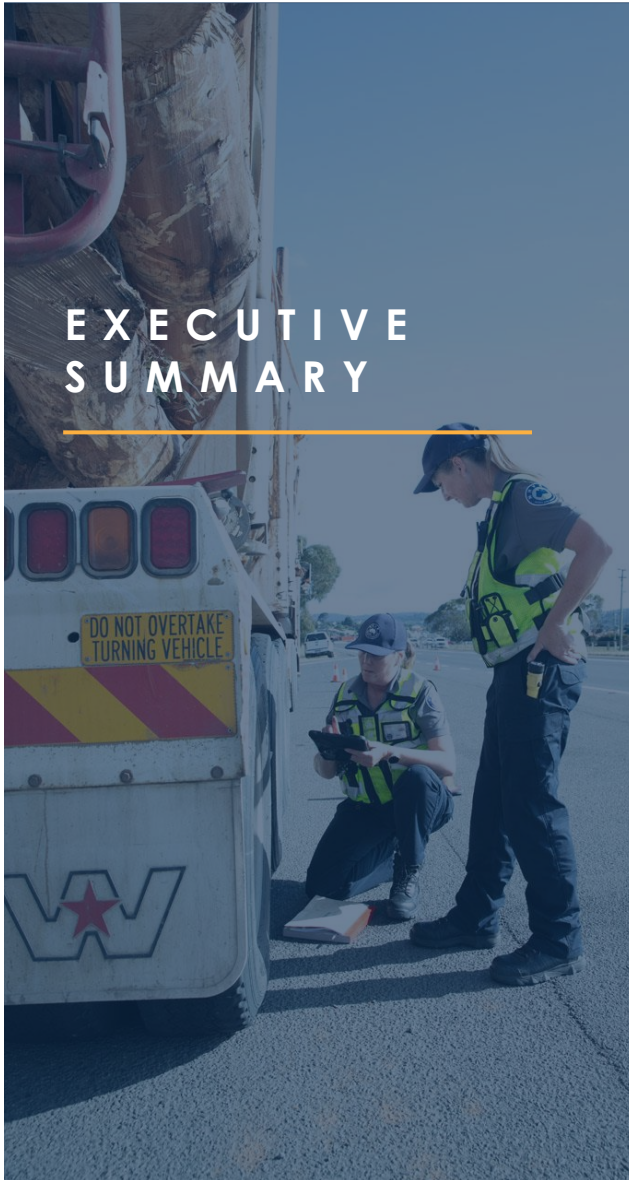


NATIONAL ROADWORTHINESS SURVEY 2024

A health check of Australia's
heavy vehicle fleet
Plant and SPVs

MAY
2025





EXECUTIVE SUMMARY

PLANT AND SPV INSPECTIONS

Overall, in the NHVR Roadworthiness Survey, **950 plant and special purpose vehicles (SPVs)** were inspected.

The majority of plant and SPVs were intercepted in the same jurisdiction to which they were registered.

The average age of plant and SPVs on Australian roads is **10.7 years**, with a median mileage slightly under **73,000 km**.

OVERVIEW OF NON-CONFORMITIES

20% of plant and SPVs inspected had **at least one non-conformity**, which is an increase from the level of non-conformity seen in 2021 (13%). 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 **12% of units**.

The second highest level of non-conformity was a **self-clearing defect** for 5% of plant and SPVs, which has remained stable from 6% in 2021. 'Self-clearing' refers to a non-conformity where the use of the vehicle on road does not pose a safety risk.

Overall, **85% of plant and SPVs passed inspection** (i.e. the highest level of non-conformity was a self-clearing defect or the unit had no defect). This is a decrease from 93% in 2021.

Plant and SPVs inspected in the state they were registered in were compliant 79% of the time, while interstate inspections were compliant 85% of the time.

AREAS OF NON-CONFORMITY

The **most common non-conformity for plant and SPVs** in Australia is **lights & reflectors**. *Engine driveline & exhaust* and *structure & body* are also in the top 3 most common areas of non-conformity. These are the top 3 in both metro and regional Australia.

Non-conformity has increased across most areas, with the exception of *engine driveline & exhaust in regional Australia*, which has remained stable with 2021.

NON-CONFORMITY BY JURISDICTION

Incidence of non-conformity in plant and SPVs has **increased** for inspections in Victoria (VIC) and in metro South Australia (SA). Despite the increase, non-conformity remains below 2016 levels in these jurisdictions. The highest incidence of non-conformity occurs across New South Wales (NSW).

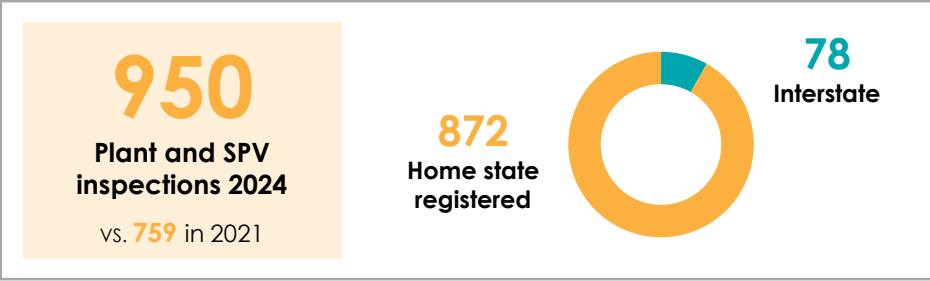
Non-conformity in plant and SPVs inspected in the Australian Capital Territory (ACT) has decreased since 2021.



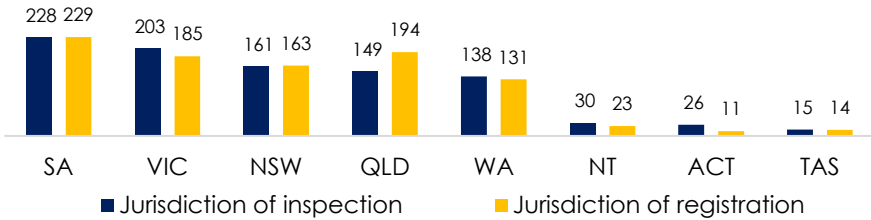
Note: The statistics in this summary relate to all plant and SPV units inspected (inclusive of powered units and trailers) unless otherwise specified. For further breakdown by vehicle type see the full published report on the NHVR website.

OVERVIEW — ALL PLANT AND SPVS (POWERED AND TRAILERS)

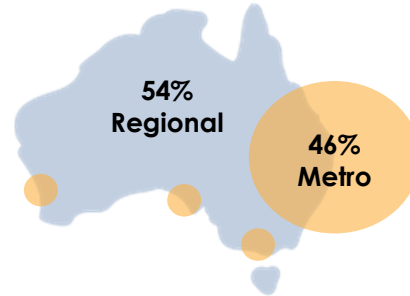
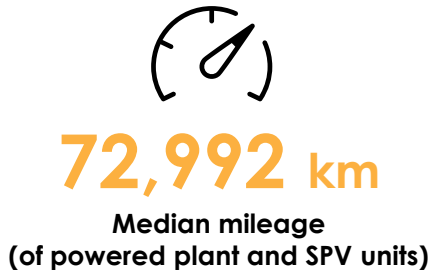
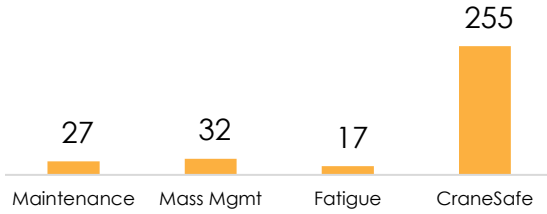
- 20% of plant and SPVs inspected nationally had at least one non-conformity.
- 92% of plant and SPVs were inspected in their state of registration.



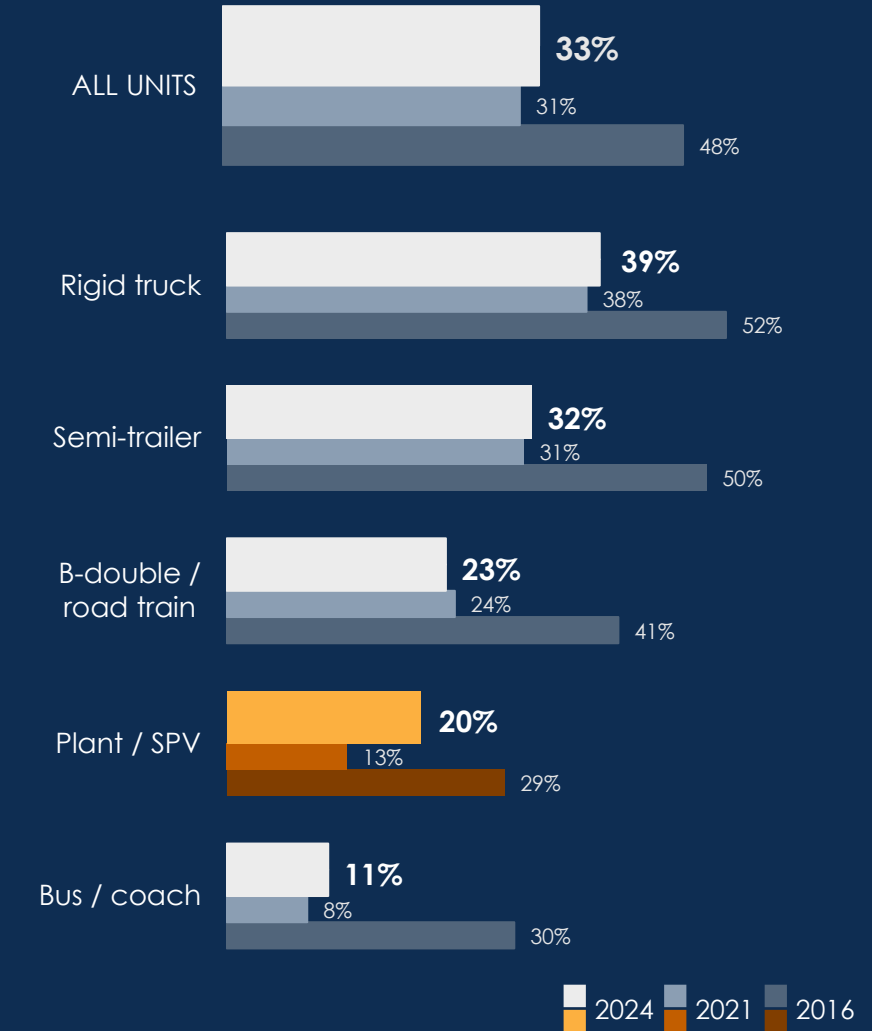
JURISDICTION



SCHEME



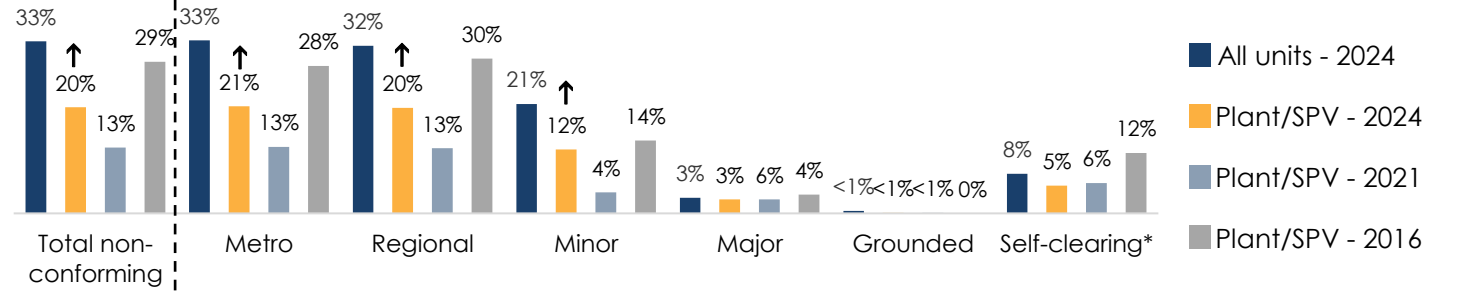
NATIONAL RATES OF NON-CONFORMITY 2024



OVERVIEW OF NON-CONFORMITIES — ALL PLANT AND SPVS (POWERED AND TRAILERS)

- The incidence of non-conformity overall in plant and SPVs has increased from 2021, having increased by 7 percentage points (from 13% to 20%). This is consistent across metro and regional inspections.
- This is driven by a significant increase in minor non-conformities (from 4% to 12%) while other levels of non-conformity remained stable.

20%
of plant and SPVs inspected had a non-conformity
↑ Vs. **13%** 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%
Plant/SPV - 2024	180	114	105	56	106	17	1	845
% of units (n=969)	20% ↑	14% ↑		5%	12% ↑	3%	<1%	85% ↓
Plant/SPV - 2021	135	81	227	38	79	16	2	686
% of units (n=783)	13%	7%		6%	4%	3%	<1%	93%
Plant/SPV - 2016	202	101	224	79	105	19	0	527
% of units (n=651)	29%	16%		12%	14%	4%	0%	82%
Home state inspection	170	108	99	51	101	17	1	770
% of units (n=889)	21%	14%		5%	13%	3%	<1%	84%
Interstate inspection	10	6	6	5	5	0	0	75
% of units (n=80)	15%	8%		8%	7%	0%	0%	93%

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 PLANT AND SPVS (POWERED AND TRAILERS)

- The most common non-conformity among plant and SPVs overall and across regional Australia is *lights and reflectors*, which saw an increase in non-conformity in 2024.
- The three most common areas of non-conformity for plant and SPVs have increased from 2021 levels. The only exception is *engine driveline and exhaust* in regional Australia which remained stable with 2021 and 2016 levels.

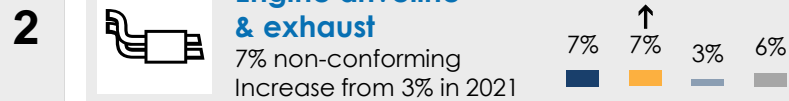
■ All units - 2024
■ Plant/SPV - 2024
■ Plant/SPV - 2021
■ Plant/SPV - 2016

TOP 3 — TOTAL



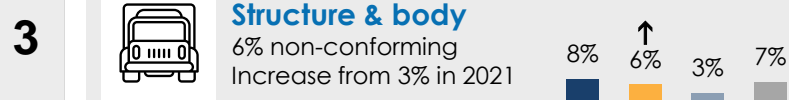
Top 3 reasons for refusal in **lights & reflectors**

- 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 & exhaust**

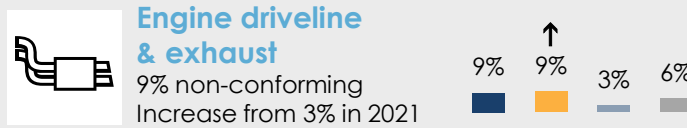
- Oil leaks
- Fuel leak
- Exhaust system leaks



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

- Rear marking plates are faded, damaged or incorrectly fitted
- Chassis/frame damage or rust
- Mudguards are not properly fitted

TOP 3 — METRO



Top 3 reasons for refusal in **engine driveline & exhaust**

- Oil leaks
- Fuel leak
- Exhaust system leaks



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

- Light not operating, damaged, loose or wrong colour
- Reflectors are damaged, obscured, deteriorated, missing or in the wrong location
- Headlight does not project white light



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

- Rear marking plates are faded, damaged or incorrectly fitted
- Obscured number plates
- Mudguards are not properly fitted

TOP 3 — REGIONAL



Top 3 reasons for refusal in **lights & 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
- Mudguards are not properly fitted














Top 3 reasons for refusal in **engine driveline & exhaust**

- Oil leaks
- Exhaust system leaks
- Loose or missing engine or driveline components

AREAS OF NON-CONFORMITY SUMMARY — ALL PLANT AND SPVS (POWERED AND TRAILERS)

- Among plant and SPVs, the incidence of non-conformity has increased for *structure & body, lights & reflectors, steering & suspension, wheels & hubs, and engine driveline & exhaust*. All other areas have remained stable with 2021.

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%
Plant/SPV - 2024	56	13	86	6	15	0	1	43	31	20	66
% of units (n=969)	6% ↑	1%	10% ↑	1%	2%	0%	<1%	5%	3% ↑	2% ↑	7% ↑
Plant/SPV - 2021	43	7	51	3	11	0	0	35	26	12	54
% of units (n=783)	3%	1%	5%	<1%	1%	0%	0%	4%	2%	1%	3%
Plant/SPV - 2016	56	21	73	3	17	0	-	55	57	26	47
% of units (n=651)	7%	3%	10%	<1%	2%	0%	-	7%	9%	5%	6%
Home state inspection	53	11	81	5	14	0	1	43	30	19	64
% of units (n=889)	6%	1%	10%	1%	2%	0%	<1%	6%	4%	2%	8%
Interstate inspection	3	2	5	1	1	0	0	0	1	1	2
% of units (n=80)	4%	2%	8%	1%	1%	0%	0%	0%	2%	1%	3%

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

