TyreSafe

SAFE TYRES SAVE LIVES

POSITION PAPER

tyresafe.org

Measuring roadworthiness: an MOT-based Safety Performance Indicator

Goal 6

POSITION AS AT	VERSION	NEXT REVIEW
November 2026	1.0	After DVSA 2026–27 MOT data is published

Our position

The Road Safety Strategy should measure how roadworthy the vehicles already on our roads are, not only how safe new vehicles are when they are built. DVSA already holds the data needed to do this through the MOT. TyreSafe calls on the Department for Transport, working with DVSA, to add a small set of leading and lagging MOT-based roadworthiness indicators to the Strategy's Safety Performance Indicators, covering all defect types and published every year.

The Strategy itself says that Government is exploring further leading indicators for vehicle safety, that robust data for some of them is not yet in place, and that it welcomes stakeholder input. This paper is TyreSafe's input. For vehicle condition, the data is already in place: DVSA collects it at every MOT.

The problem

- **Tyre-related casualties are rising faster than casualties overall.** There were 201 tyre-related killed or seriously injured (KSI) casualties in 2025, 10 of them killed. That is 21% above the Strategy's 2022–24 baseline, against a 3% rise for all KSIs. Allowing for traffic, the rate rose from 0.50 to 0.59 per billion vehicle miles. (DfT RAS0701/RAS0401)
- **Casualty data alone is a weak early warning.** Contributory factors are recorded by police at the scene, who are not equipped to inspect tyres or brakes in detail, so defects are likely to be under-recorded. Small annual numbers also move around from year to year.
- **The MOT shows the scale of the risk every year.** About 1.55 million MOT tests in 2025–26 found a dangerous tyre defect (all vehicle classes). Tyres make up 61% of dangerous defects on cars and vans, and around one car or van test in 22 (4.5%) finds a dangerous tyre defect. (DVSA)
- **Tyres and brakes dominate.** Together they make up nine in ten dangerous defects found at the MOT on cars and light vans. (DVSA)
- **The Strategy's vehicle measures look forward, not at today's fleet.** Its vehicle commitments centre on new safety technology for new vehicles. None of its 17 Safety Performance Indicators measures the condition of vehicles already on the road: they cover casualties, speed, seat belts, drink and drug driving and distraction.

The Strategy says Government is exploring further vehicle safety indicators, giving the proportion of vehicles with a valid MOT and the safety ratings of new cars as examples. A valid MOT shows that a vehicle was tested, not what condition it is in: a car can pass with its tyres or brakes advised as close to their limit.

What we are asking for, and from whom

The Department for Transport (owner of the Strategy and its monitoring framework) and **DVSA** (owner of the MOT data) to adopt the indicators below, report them annually alongside the Strategy's other SPIs, and set a direction of travel once a baseline is agreed.

Indicator	Type	What it tells us	Latest value
Share of car and van MOT tests with a tyre or brake advisory	Leading	How many vehicles are heading towards a defect	Tyres 25.2%, brakes about one in five (21.9%) (Feb 2025)
Share of tyre and brake failures that had an advisory on the same item at the previous test, where the previous year's test can be traced	Leading	Whether early warnings are being acted on	Tyres 36.5%, brakes 38.5% (cars, Feb 2025)
Share of car and van MOT tests with a dangerous defect (any item)	Lagging	The condition the fleet actually reached	7.2% (2025–26)
Share of car and van MOT tests with a dangerous tyre defect, and with a dangerous brake defect	Lagging	Where the problem sits	Tyres 4.5%, brakes 2.4% (2025–26)

The leading indicators show where risk is building and where to act. The lagging indicators show whether that action worked, or whether more action or resources are needed. Read alongside casualty data, they give Government a full picture. Advisory follow-through matters most, because it measures something drivers and the industry can change.

Why we believe it would work

The data exists and is robust. DVSA publishes anonymised record-level MOT data. TyreSafe's own analysis of it shows these indicators can be built and give stable results:

- Re-running the same method on different years gives near-identical results: 37.3% of 2024 tyre failures had a tyre advisory in 2023, against 36.5% for 2025 failures with a 2024 advisory. Widening the window to cover about eight in ten failures gives the same 36.5%.
- Advisories predict future failures. Cars with a tyre advisory were nearly twice as likely to fail on tyres the following year (9.4% against 5.2%). Cars advised two years running were about 2.5 times as likely to have a dangerous tyre defect (8.5% against 3.3% for cars never advised).
- The pattern holds whichever month is used: in every month of 2024–25, a tyre advisory roughly doubled the chance of a dangerous tyre defect a year later, and February gave the lowest share of failures with an advisory the year before.
- The MOT's 2.4% of cars with tread below 1.6mm on the day agrees with independent tread-depth survey evidence, which gives confidence that the MOT reflects real-world condition.

How confident we are

HIGH	That MOT data can produce a reliable, consistent, low-cost indicator every year.
HIGH	That advisories identify vehicles at much higher risk of a dangerous defect.
MODERATE	On the direct link between MOT defect rates and casualties. That link has not been measured, which is why we propose these as indicators of risk, to be read alongside casualty data, not as a replacement for it.

Limitations and how to handle them

- **Vehicles under three years old are not tested.** Defects concentrate in older vehicles (dangerous tyre defects rise from 3.0% at 3–4 years to 5.7% at 10 years and over), so the indicators cover most of the risk.
- **The MOT records condition on the day, not the average on the road.** Some drivers fix problems before the test. The measure is still consistent year to year, which is what an indicator needs.
- **Changes to the MOT manual or defect codes could break the series.** DVSA would need to flag and bridge any change.
- **Who produces it.** We believe DVSA, as the data owner, should produce the indicators so they are official and independent. TyreSafe is happy to share its method.

What we are not asking for

- No new law, offence or change to the MOT test.
- No cost to motorists.
- Not a tyre-only measure: the headline indicator covers every defect type.
- Not an immediate target: first a baseline, then a direction of travel agreed with DfT.

How this fits with our other goals

The leading indicator would show whether advisory reminders, THINK! campaigns, the retraining course and better enforcement are changing how drivers look after their vehicles.

Review and changes

TyreSafe reviews this position every year when new DVSA MOT data and DfT casualty statistics are published, and sooner if new evidence emerges. If the evidence changes, so will our position, and we will record what changed and why.

Version	Date	Change
1.0	November 2026	First published

Sources

- Department for Transport, Reported road casualties Great Britain, tables RAS0701 and RAS0401, final 2025 data (30 July 2026)
- Department for Transport, Road Safety Strategy (7 January 2026), Appendix A: Safety Performance Indicators, pp. 47–48
- DVSA, MOT testing data 2025–26 (10 September 2026)
- TyreSafe analysis of DVSA anonymised MOT data: car tests in February 2023, 2024 and 2025, linked by vehicle

- TyreSafe written evidence to the Transport Committee's Road Safety Strategy inquiry: RSS0014 (May 2026) and supplementary evidence RSS0152 (November 2026)