



## MOTOR VEHICLE SAFETY INSPECTIONS

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### ISSUE

This report identifies the states that require periodic motor vehicle safety inspections and summarizes the findings of the federal Government Accountability Office (GAO) on the effectiveness of these programs. It also discusses recent legislation proposing safety inspections in Connecticut. (Note: this report addresses safety inspections only. It does not address emissions testing.)

### SUMMARY

According to an [August 2015 GAO report](#), 16 states currently require periodic motor vehicle inspections, about half the number of states (31) that required these inspections in 1975. GAO noted that some states have eliminated the safety inspections to save money or because of questions about their effectiveness. State officials also told GAO that the inspection programs would benefit from additional guidance from the National Highway Traffic Safety Administration (NHTSA).

There is disagreement about the inspections' effectiveness. Although state officials who responded to GAO's survey said inspection programs help improve vehicle safety, GAO states that "research remains inconclusive about the effect of safety inspection programs on crash rates."

GAO said research has also shown that motor vehicle component failure is a factor in a relatively small percentage of crashes. It cites a 2008 NHTSA report which estimates that vehicle component failure was the "critical reason" (see below) in about 2% of crashes, and that evidence of a vehicle system breakdown was present (although not necessarily the cause of the accident) in 6.8% of crashes. NHTSA found that driver behavior was the "critical reason" in 94% of crashes.

In 2013, two bills requiring vehicle inspections were introduced in Connecticut. [HB 5187](#) would have required annual safety inspections for all motor vehicles; [HB 6021](#) would have required the Department of Motor Vehicles (DMV) to periodically inspect



registered motor vehicles with odometer readings of at least 100,000 miles. The Transportation Committee heard testimony on both bills, but did not vote them out of committee.

According to the state Department of Transportation, vehicle mechanical failure was a contributing factor in 0.67% of reported accidents in Connecticut in 2008. Unsafe or blown tires accounted for an additional 0.35% of reported accidents in that year.

## **MOTOR VEHICLE INSPECTIONS**

### ***National Highway Traffic Safety Administration (NHTSA) Recommendations***

One of NHTSA's goals is to support state efforts to improve traffic safety. To this end, NHTSA recommends that each state periodically inspect registered vehicles for safety defects and require vehicle owners to fix them.

Initially, NHTSA could withhold a percentage of a state's allotted federal highway funds if a state did not have such a program. But Congress limited NHTSA's ability to withhold these funds in 1976. "Since that change," GAO says, "states have been able to choose whether or not to follow the [NHTSA] guidelines in developing their highway safety programs."

### ***States Requiring Periodic Safety Inspections***

After Congress acted, the number of states requiring safety inspections dropped significantly. According to GAO, the number of states requiring such inspections dropped from a high of 31 in 1975 to 16 (including the other five New England states) in 2015. The states requiring safety inspections are Delaware, Hawaii, Louisiana, Maine, Massachusetts, Missouri, New Hampshire, New York, North Carolina, Pennsylvania, Rhode Island, Texas, Utah, Vermont, Virginia, and West Virginia.

According to GAO, 11 of these states require annual inspections, three (Delaware, Missouri, and Rhode Island) require biennial inspections, and two (Louisiana and Utah) specify other schedules. In 15 states (all but Delaware) state-licensed private inspection stations conduct the inspections. Fees, which are paid by vehicle owners at the time of inspection, range from zero in Delaware to \$55 (which includes an emissions inspection fee) in Rhode Island. The states receive a portion of the fee, typically \$5 or less, although some states receive more.

## **SAFETY INSPECTIONS' IMPACT ON VEHICLE SAFETY**

### ***State Responses***

Officials in 15 of the 16 inspection states responded to GAO's inquiries. All 15 said the inspection programs improve vehicle safety by identifying unsafe vehicles and either removing them from the roads or requiring that owners fix them. For example, Pennsylvania said about 20% of that state's registered vehicles were repaired after initially failing the safety inspection; Virginia said its program identified safety problems in 19% of registered vehicles in that state.

Several state officials told GAO that the safety inspections are worthwhile because people are now keeping their vehicles longer. Officials also said the inspections are particularly useful in states where frequent snow, and the corresponding use of road de-icing solutions, hastens vehicle corrosion.

### ***Research on the Value of Safety Inspections***

GAO found that research on the value of safety inspections "remains inconclusive." Three U.S. studies of the relationship between safety inspections and crash rates over the past two decades have failed to find "statistically significant differences in crash rates in states with inspection programs compared to those without." Only one of three international studies suggested that safety inspections "potentially reduce the likelihood of crashes," GAO said, but even that study could not determine how much of an effect the inspections had.

GAO studied crash data in New Jersey and Oklahoma, both before and after those states eliminated their inspection programs. In each state, GAO reported, "crashes involving vehicle component failure were generally between 2% and 3% of all crashes and varied little from year to year, even after the elimination of the inspection programs." But GAO cautioned that it could not conclude whether the programs had made a difference because other factors, such as traffic safety enforcement, could have impacted crash rates.

GAO also reviewed NHTSA data for police-reported motor vehicle crashes for the period between 2009 and 2013, and found that police recorded vehicle component failure in about 2% of all crashes nationwide, with the three most frequent failures related to tires, brakes, and steering. This is similar to the findings of a NHTSA study conducted between 2005 and 2007. [According to NHTSA](#), the National Motor Vehicle Crash Causation Survey looked for, among other things, the "critical reason" for a crash, which NHTSA said is the "last failure in the chain of events leading up to the crash." (NHTSA states that the "critical reason," while important, "is not intended to be interpreted as the cause of the crash" or to assign blame.)

NHTSA attributed 94% of the critical reasons to driver behavior, with about 2% each to vehicle component failure and environmental conditions (e.g., slick or icy roads).

Both GAO and NHTSA cautioned that the 2% figure might understate how many crashes are caused by vehicle system or component failure. NHTSA noted that police do not conduct detailed vehicle inspections at crash sites, but rely on visual inspection of the vehicles involved. "This resulted in only mostly external, easily visible factors (tires, brakes, steering column, etc.) that were cited as the few vehicle-related critical reasons," NHTSA said. "The related statistics may not therefore be representative of the role of other internal vehicle-related problems that might have led to the crash." The 2005-2007 NHTSA study found that 6.8% of the vehicles involved in crashes had a system breakdown "likely to increase the risk of a crash," although these were not necessarily the cause of the accident.

## **OTHER SAFETY INSPECTION PROGRAM ISSUES**

### ***Program Cost and Effectiveness***

The GAO report noted that some states that eliminated safety inspections did so both to save money and because of a lack of evidence of the programs' effectiveness.

### ***Lack of Direction from NHTSA***

Officials in the 15 states who responded to GAO suggested that their inspection programs would benefit from more NHTSA guidance, particularly on how the safety inspections should incorporate new vehicle technologies. State officials frequently cited LED (light emitting diode) brake lights as an example. The lights have many small bulbs, and safety inspectors do not know how many of them must fail before they can rule a brake light unsafe. NHTSA standards do not directly address this question.

NHTSA officials told GAO that NHTSA has adopted a "hands-off" approach to state vehicle inspections and is spending more of its resources on areas that have a greater impact on driver safety, such as driver behavior. GAO suggested, and NHTSA supported, opening a "dedicated communications channel" by which states could bring safety inspection questions to NHTSA's attention.

## **CONNECTICUT EXPERIENCE**

### ***Proposed Legislation***

In 2013, the Transportation Committee heard testimony on [HB 5187](#) and [HB 6021](#). [HB 5187](#) would have required annual safety inspections for all motor vehicles,

including their mud flaps, lights, windshield wipers and windows; [HB 6021](#) would have required DMV to periodically inspect registered motor vehicles with more than 100,000 miles on their odometers. The bills were heard by the Transportation Committee but were not reported favorably.

Among those opposing the bills was DMV Commissioner Melody Currey, who referred to the lack of a significant correlation between vehicles' mechanical failure and accident rates. Currey also said DMV was concerned the proposals would "place potentially enormous financial burdens" on state residents and require additional funding for DMV "even if [DMV] was able to utilize independent contractors, automotive repairers, and motor vehicle dealers to assist with the inspections."

Also testifying against the bill was Sandra Clark, representing the Connecticut Motorcycle Riders Association, who pointed to the lack of proof that inspections result in safer vehicles. She also said the inspections were not needed because newer vehicles have sophisticated computer diagnostic systems, and that the inspections would take up too much of vehicle owners' time.

Testifying in favor of the proposals was Glenn Terlecki, president of the Connecticut Police and Fire Union. Terlecki said requiring periodic inspections would lead to a "vast increase in compliance with equipment related violations" and would improve road safety.

### ***Contributing Factors to Connecticut Crashes***

According to "[Connecticut Traffic Accident Facts \(2008\)](#)," in 2008, vehicle mechanical failure was a contributing factor in 0.67% of all reported accidents in the state; in 0.58% of accidents in which someone was injured; and in 0.71% of fatal accidents. Unsafe or blown tires accounted for 0.35% of all reported accidents, 0.3% of accidents in which there was an injury, and were not involved in any accidents in which someone died.

By comparison, the largest single contributing factor in all crashes and in those involving an injury was a driver following another vehicle too closely (a factor in 28.35% of all crashes and 30.43% of crashes involving an injury). The two largest factors in state crashes in which someone was killed were people (1) driving under the influence or (2) losing control of their vehicles (28.93% and 25%, respectively).

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