



Automotive
Engineering

FACT SHEET

LEADING CAUSES OF VEHICLE BREAKDOWNS

Background

AAA, a leader in roadside assistance since 1915, received over 32 million requests for roadside assistance in 2017. Data from these events was collected and analyzed in an effort to provide consumers with meaningful insights and trends as it relates to their vehicle. While all vehicles are susceptible to breakdowns, AAA found that vehicles 10 years old or older are twice as likely to be stranded at the roadside, and four times more likely to require a tow*.

Key Findings

In 2017, 67 percent of calls AAA received for roadside assistance were for vehicles 10 years and older, while 33 percent of calls received were for newer vehicles (age 9 years and newer).

Approximately thirty-five percent of the vehicles AAA responded to at the roadside required a tow to a repair facility. Of those vehicles, 81 percent were 10 years and older.

Based on AAA data, the top reasons for serious breakdowns that result in a tow are:

- Battery and related electrical systems issues (23 percent)
- Engine cooling system failures (11 percent)
- Tire damage that cannot be repaired or replaced at the roadside (10 percent)

AAA Recommendations

- Always follow the automakers' recommended schedule for preventive maintenance.
- The chances for a battery or other electrical system issue grows as the age of the vehicle increases. Through its mobile battery program, AAA offers its members free testing of a vehicle's battery and electrical system.
- Look for fluids such as coolant pooling underneath the vehicle when it is parked. This could be an indication of a leak or other impending problem that can easily be solved versus dealing with the vehicle overheating and leading to a costlier repair later.
- Inspect tires for cuts, gouges or sidewall bulges. Also, check tire tread depth, pressure and whether the vehicle is equipped with a spare tire.

*compared to vehicles under 10 years of age

To understand the top reasons for breakdowns and if vehicle age was a factor, AAA pursued three lines of inquiry:

1. At what vehicle age does the likelihood of a vehicle breakdown significantly increase?
2. Of those vehicles that breakdown, what percentage have a serious enough issue to require a tow?
3. What are the leading causes of breakdowns that cannot be resolved at the roadside, requiring a vehicle be towed to a repair facility?

Methodology

Data from roadside assistance events for the 2017 calendar year was analyzed with the filters applied to exclude motorcycles and RVs. Cancelled requests and incidents where no service was rendered were likewise excluded (e.g., vehicle is gone on arrival of responding AAA equipment). Records that did not have valid resolution codes were not included in this analysis.