

## Concerns Turn To Traffic Safety As More Aluminum Vehicles Hit The Roads

VIDEO: [https://youtu.be/9\\_Abd7EiSBs](https://youtu.be/9_Abd7EiSBs)

Remember the [Chevy Vega](#)?

The Vega earned praise and honors at its debut, including 1971 [Motor Trend Car of the Year](#). Subsequently, the car became recognized for a variety of dilemmas related to its engineering, reliability, safety, tendency to rust, and engine endurance. Notwithstanding a string of recalls and design improvements, the Vega's difficulties tarnished both its own as well as General Motors' reputation. Production ended with the 1977 model year.

Over time, the Vega has almost become synonymous with the Ford Edsel as the worst car of all time. Ask a former-Vega owner what they despised most and many will tell you about the aluminum block engine. Despite being used in aircraft, the idea of aluminum in cars hasn't caught on — until now.

In an Executive Summary published in 2014 by [Ducker Worldwide](#) entitled, "*2015 North American Light Vehicle Aluminum Content Study*" the authors go to great lengths to prop-up the part aluminum will play in vehicles.

Among the predictions:

1. Pickup trucks will carry the greatest aluminum content at just under 550 pounds per vehicle,
2. Tesla, BMW, and Ford will exceed the average aluminum content
3. The F150 will contain just over a half-ton of aluminum, and
4. The total aluminum content for 17.5 million vehicles expected to be in production in 2015 will hold almost 7 billion pounds of aluminum

If the idea of riding in a vehicle made of the same material as soda cans is unnerving, there's good news. Tesla cars are considered the safest on the road despite "exceeding the average aluminum content."

While the majority of cars on the road are manufactured with a steel body and chassis, aluminum is finding a home in the automotive industry.

Previously found in luxury vehicles, aluminum jumped to the mainstream in 2014 when Ford announced the F150 would become the first pickup with an all-aluminum body.

As car makers look for sleeker, lighter-weight vehicles to increase fuel efficiency, the number of aluminum vehicles is expected to rise.

According to Ford, the switch to aluminum peeled over 700 pounds from the trucks and increased towing capability and overall efficiency.

The largest benefit to aluminum is the fuel savings. Benefiting both consumer and car-maker, safety concerns have not been abandoned.

### **How Safe Are Aluminum Cars?**

The aluminum bodies haven't affected safety evaluations. The 2015 all-aluminum body on the F150 was given a five-star crash rating from the [National Highway Traffic Safety Administration](#), the highest grade a model can get.

"There doesn't seem to be any significant difference between steel and aluminum in crashes," said Jack Nerad, executive director for Kelley Blue Book's KBB.com.

One potential problem with buying a vehicle with an aluminum body is the lack of body shops employing workers skilled in repairing auto aluminum.

### **How Safe Are Teslas?**

Independent measurement by the National Highway Traffic Safety Administration (NHTSA) has granted the [Tesla Model S a 5-star rating](#) in each subcategory without deviating. Roughly 1% of every car examined by the government garner five stars. NHTSA does not grant a star rating above 5. However safety records better than five stars are included in the cumulative Vehicle Safety Score (VSS) presented to car makers, where the Model S achieved a combined report of 5.3 stars.

Of vehicles examined, including each make and model authorized for sale in the United States, the Model S set an unmatched grade for the smallest probability of harm to passengers and driver. While the Model S is a car, it also passed the score of all SUVs and minivans. This number takes into consideration the possibility of injury from front, side and rear accidents.

The first known death happened in May 2016 when [Joshua Brown](#), 40, was killed. Brown's Tesla failed to [tell the difference](#) between a large white 18-wheeler crossing the road in front of him.

The police report said the vehicle's top was torn off and the NHTSA opened an inquiry into the wreck.

The accident was Tesla's first autopilot death in over 130 million miles. Among all vehicles in America, the fatality rate is one every 94 million miles.

From talking with numerous auto body repair shops, it seems the biggest problem with Tesla's Model S is that the high-end buyers just aren't used to driving a hatchback. They tend to leave the hatchback up, get in and drive out of their multi-car garage and rip the hatch right off.