

Diesel vehicles save owners thousands

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Drivers of diesel vehicles can save thousands of dollars in total ownership costs compared to similar gasoline vehicles, according to a University of Michigan Transportation Research Institute study.

"The estimates of savings for three and five years of ownership vary from a low of \$67 in three years to a high of \$15,619 in five years, but most of the savings are in the \$2,000-to-\$6,000 range, which also include the extra cost that is usually added to the diesel version of a vehicle," said UMTRI researcher Bruce Belzowski. "Though there are

some exceptions, the overall direction of the results supports the idea that diesel vehicles compete well within the U.S. market.

"In particular, the idea that one can get a return on one's initial higher investment in a [diesel vehicle](#) within three years is a very positive sign, considering that new vehicle buyers tend to keep their new vehicles for an average of three to five years."

Belzowski and UMTRI colleague Paul E. Green reviewed the role clean diesel vehicles play in the current vehicle fleet by analyzing the total cost of ownership of diesels and comparing it to that of their gas vehicle counterparts.

They developed three- and five-year cost estimates of depreciation by modeling used-vehicle auction data and fuel costs by modeling government data. They then combined these estimates with three- and five-year estimates for repairs, maintenance, insurance, fees and taxes from an outside data source.

Among their findings:

- In the three-year timeframe comparison, diesel vehicles in the mass-market passenger car segment are estimated to save owners significant money, with the VW Jetta owner saving \$3,128, the VW Jetta Sportwagen owner saving \$3,389 and the VW Golf owner saving an estimated \$5,013.
- In the luxury segment, all the diesel versions of the Mercedes-Benz E Class (\$4,175), Mercedes-Benz GL Class (\$13,514), Mercedes-Benz M Class (\$3,063), Mercedes-Benz R Class (\$5,951) and VW Touareg (\$7,819) save owners money in the three-year timeframe.
- All of the diesel vehicles in all segments had better miles per gallon than the gasoline versions, with the diesels having 8

percent to 44 percent higher miles per gallon.

- All of the diesel vehicles had lower fuel costs than all the gas versions of comparable vehicles, with 11 of the 12 vehicles showing double-digit reductions in fuel costs, ranging from 10 percent to 29 percent.
- Similar to the three-year comparisons, five-year estimated [fuel costs](#) for diesel vehicles are less than those of comparable gas versions. The percentage difference in terms of the reduction from gas to diesel costs decreased for some diesel-gas comparisons as diesel prices began to increase around the 2005 timeframe.
- Eleven of the 12 diesel vehicles held their value better than comparable gas vehicles over the three-year timeframe, with eight vehicles showing double-digit percentage savings ranging from 17 percent to 46 percent.
- Nine of the 10 diesel vehicles hold their value better than comparable gas vehicles over the five-year timeframe, with five vehicles showing double-digit percentage savings ranging from 10 percent to 39 percent.

Despite the advantages, Belzowski and Green say that diesels face continuing challenges to gain a larger foothold in the U.S.

"Some of these include the potential increase in the cost of diesel fuel compared to gasoline and the resulting need for diesels to proportionally improve their fuel economy to maintain a total-cost-of-ownership advantage," Belzowski said. "This is particularly important because both gasoline and diesel-powered vehicles must improve their fuel economy as required by Corporate Average Fuel Economy regulations for 2016 and 2025.

"As the market for diesels increases as more diesel-powered vehicles are introduced into the market—diesel variants of the Chevrolet Cruze, Jeep

Grand Cherokee, Ram 1500 and Ram ProMaster have recently been announced—the premium that diesels carry in the marketplace today may decrease through the sheer number of competing models. But the increased number of diesel models in the fleet may also bring down the price of diesel-powered vehicles, providing consumers with both price and fuel savings."

Provided by University of Michigan

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