

Consumers are willing to pay \$4,900 extra for a car that drives itself

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The average consumer would be willing to pay \$4,900 more for a car that had self-driving technologies, and \$3,500 more for crash avoidance, according to a new study published in *Transportation Research Part C: Emerging Technologies*.

The researchers, from Cornell University in the US, also found a big difference in what people would be willing to pay: some would stretch to more than \$10,000 for <u>automation</u>, while others would pay nothing at all. Car manufacturers should consider this as technologies develop and give people flexible options.

Today it's possible to buy a car that can park itself, stay in lane and maintain a constant speed. The technology is developing fast and many companies are already testing self-driving cars; it's likely we will soon see fully automated cars on the market. But will people be willing to pay for this technology and how can manufacturers and policy makers make sure it is rolled out to our roads smoothly? This is what Dr. Ricardo Daziano and his colleagues wanted to find out.

"Automation of personal transportation is becoming a reality at a faster pace than anticipated," commented Dr. Daziano, the lead author of the study from Cornell University. "To plan for and analyze the large impacts of automation, policymakers and <u>car manufacturers</u> need to understand the market. Our study is an initial attempt to quantify how households currently perceive and economically value automated vehicle technologies."



The team used hypothetical scenarios to predict what people would pay for cars with self-driving features. They asked 1,260 people across the US questions about hypothetical vehicles described in terms of their price and features, such as automated navigation systems. Participants had to choose between cars in a series of 'choice experiments'.

The results suggest that, on average, people would be willing to pay an additional \$3,500 for partial automation and \$4,900 for full automation.

However, there was a large range in people's preferences: many people would be willing to pay more than \$10,000 for full automation, but many others would not pay anything at all for the technology. The researchers developed economic models that show consumer demand for automation is split roughly equally between high, modest and no demand. This, they say, highlights the importance of considering flexible preferences for emerging vehicle technologies.

"Forecasting the transition to an automated transportation reality is a complex task that requires flexible mathematical models of human behavior as well as an understanding of the likely technology developments and possible business models that may emerge," Dr. Daziano commented. "On the one hand, I feel particularly attracted to this interplay of economic modeling with <u>technology</u> innovation. On the other hand, I don't enjoy driving so I look forward to cars that will drive (themselves) for me, and I would like to have an insider's view of when this could happen."

More information: Ricardo A. Daziano et al. Are consumers willing to pay to let cars drive for them? Analyzing response to autonomous vehicles, *Transportation Research Part C: Emerging Technologies* (2017). DOI: 10.1016/j.trc.2017.03.003



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