

Driverless vehicles: is it time to rethink where and how we spend our road safety research dollars?

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Abstract

Driverless vehicles represent the most significant advancement in road safety since man and woman first got behind the wheel. By removing the human factor, we will eliminate the single biggest contributor to road accidents. So, should we be revising our existing road safety research priorities? And how will the advent of fully automated vehicles impact on society at large?

Background

How much do we spend around the globe each year on road safety research and programs? It's probably impossible to come up with an accurate figure, but safe to say it would run into the billions.

Now, how much of this current spending and research will be made redundant by the arrival of the automated vehicle?

At last September's Frankfurt Auto Show, US Transportation Secretary, Anthony Fox, predicted driverless cars would be in use around the world within the next decade.¹

In the same month, The Atlantian published an article that said the arrival of the automated vehicle could be the greatest public health achievement of the 21st century, saving nearly 30,000 lives a year in the US alone.²

More recently, the UK Institute of Mechanical Engineers has released a report that says making all vehicles autonomous could prevent up to 95% of all traffic accidents.³

So that begs the question – should more of our road safety research budget be focused on bringing on driverless vehicle technology sooner rather than later? Are we too focused on technologies and programs that will be redundant in a decade or less? And if we were to review our current research spending priorities, what impact would it have on our short term road safety goals?

These are difficult questions, but we shouldn't shy away from asking them, nor expecting answers.

In my oral presentation I will explore these question in the context of the broader societal challenges and benefits of driverless technology.

The driverless vehicle will affect not just our mobility, but our jobs (what we do) the way we live and where. We are just now starting to think about some of the implications, and it is mindboggling.

Driverless vehicles will eliminate many existing jobs; the shift to centralised city living will be reversed, and regional towns and infrastructures will be significantly boosted; it will turn many existing financial models focused around vehicle ownership and infrastructure investment on their heads.

These are just some of the broader implications. Drill further, and we see driverless vehicles impacting on nearly every aspect of our lives and economic systems.

The big question right now is – are we reading the signs? Will we be ready to meet the challenges and adjust to the changes, or will we continue to live in a Kodak moment?

References

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