



This is what the expert says

## The transport of the future

**Self-driving cars that take you to your holiday destination relaxed, free-flowing traffic on German highways, fewer accidents. These are the ideals regarding the transport of the future. How does the expert assess the future situation? Three questions to Prof. Markus Friedrich, professor at the Department for Transportation Planning and Traffic Engineering at the University of Stuttgart. For how much longer will we be stuck in traffic jams?**

### How will transportation develop in the future?

The forecasts for Baden-Wuerttemberg show an increase of 15 percent in passenger traffic between 2010 and 2030. Freight traffic is expected to increase by 40 percent. The number of cars is growing, we use the car more often and drive longer distances. At the same time, however, we cycle more and often take public transport. Overall, this means more vehicles on the roads, more traffic jams and a more crowded public transport.

### Are automated cars the solution to our congestion problem?

There is currently no clear answer to this question, since the rules under which automated cars will be driving have not yet been clearly defined. Suppose the cars adhere to all traffic rules on the highway, drive very steadily and cause fewer accidents, then the capacity of the road network will increase and traffic will flow better. It looks different in the city. The interaction of cyclists, pedestrians and automated cars will be a major challenge and can also lead to lower capacity. In principle, driving with automated vehicles will be more comfortable because the travel time in the vehicle can be partially spent on other activities. And if cars are further improved, more people are going to use them. The efficiency

### University Communications

Head of University  
Communications and Press  
Spokesperson  
Dr. Hans-Herwig Geyer

#### Contact

Phone: 0711 685-82555  
[hkom@uni-stuttgart.de](mailto:hkom@uni-stuttgart.de)  
[www.uni-stuttgart.de](http://www.uni-stuttgart.de)

#### Contact partner

Bettina Künzler

#### Contact

Phone: 0711 685-81044  
[bettina.kuenzler@hkom.uni-stuttgart.de](mailto:bettina.kuenzler@hkom.uni-stuttgart.de)  
[www.uni-stuttgart.de](http://www.uni-stuttgart.de)



gains from automated vehicles will then be lost again as a result of more traffic.



Especially during the holiday season there are long traffic jams on German roads.

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### **What is your proposed solution?**

It will be difficult to solve traffic problems without changing people's behavior. Traffic only works if we cooperate. For this we need a different framework, which must be provided by politics. It is not enough to influence behavior through incentives such as cheaper tickets or the promotion of electric vehicles. If we really want to change something, we must demand more money from motorists and invest this money in all transportation systems. This is a challenging task that politicians can only solve across party lines. But the traffic jam at the beginning of the holiday season will also exist in the future. We cannot size the roads and design traffic management in such a way that the peak demand in holiday traffic can be handled without congestion. The only thing that helps are "intelligent" road users who adjust their departure time: Leave either at 3 a.m., at 3 p.m., or a day later.

### **Expert contact:**

Prof. Dr. Markus Friedrich, professor at the Department for Transportation Planning and Traffic Engineering, Pfaffenwaldring 7,



70569 Stuttgart, phone: +49 711 685-82482, email:  
[markus.friedrich@isv.uni-stuttgart.de](mailto:markus.friedrich@isv.uni-stuttgart.de)