A computer-driven car may not be commercially available for at least another ten years, but American regulators are working to reckon out what kinds of cockpit controls are appropriate for a human motorist in a computer-driven vehicle. Tim Johnson, NHTSA's director of crash avoidance and electronic controls research, says the agency will conduct the $1.75m research project with the Virginia Tech Transportation Institute in Blacksburg, Virginia.

The researchers want to design controls that will enable a motorist to normally let the computer drive the car, but still quickly and easily take manual control if the computer gets confused. “We are putting a high priority on this. We are trying to figure this out,” said Johnson.

A number of automakers have tried out driverless cars, but the pace of research picked up after Google deployed a radar-guided Toyota Prius and lobbied state legislatures to allow driverless vehicles on public roads.

Last month, the California Legislature passed a law to establish safety and performance standards for such vehicles.

Google founder Sergey Brin subsequently boasted that his company will have driverless cars available for the public within a decade. But panelists at a recent topical SAE conference think it will probably take longer than that to develop a production-ready driverless vehicle.

Continental have road-tested a driverless Volkswagen Passat, and automakers including Ford, General Motors, Mercedes-Benz, Audi, and BMW are developing vehicles that can guide themselves during low-speed traffic jams.

But such systems require the motorist to remain vigilant in case driving conditions suddenly change. Automakers have not yet figured out how to design a driverless car reliable enough to allow the driver to take a nap. A robotic vehicle “would have to be a much better driver than a human,” says NHTSA's Johnson.