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Making the car-office safer

A new software technology developed by Comfort Motion Technologies (CMT), may make your vehicle driving experience more comfortable according to Dr. Terri Lynch-Caris '88, P.E., associate professor of Industrial and Manufacturing Engineering. She was interviewed about the software technology in the Indianapolis Business Journal because of expertise in the area of ergonomics.

For those business professionals and those who spend a lot of work time in the car, AMT's Vehicle Seat Multi-Position software technology may be just the thing to reduce fatigue and improve comfort while driving for business since it seems to promote healthy movement. The technology, according to the CMT web site, automates subtle changes in the seat position while traveling, relieving pressure points, reducing tissue fatigue and improving circulation to the areas most affected by the negative effects of sitting.



Dr. Terri Lynch-Caris

What this translates into for drivers, said Lynch-Caris, is seating that supports the natural alignment of the back and keeps you in motion while you're driving, resulting in less fatigue caused by sitting in a stationary position for long periods of time. This technology may relieve back and muscle fatigue and help keep the driver vigilant, she explained.

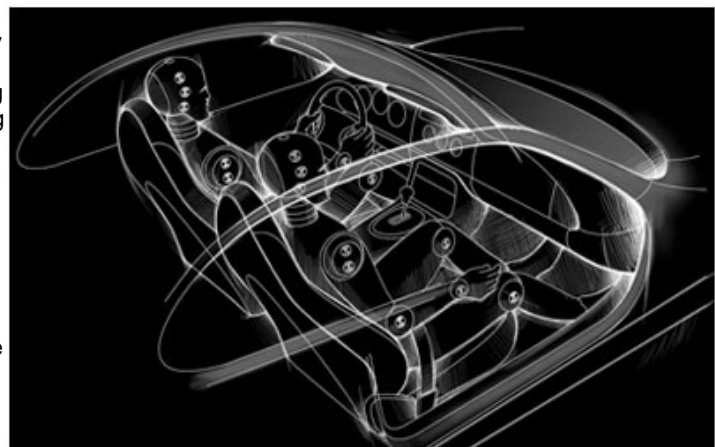
New technologies enable drivers to work from their cars more and more. A new seat technology can help make the car-office a safer way to drive according to Dr. Terri Lynch-Caris, associate professor of Industrial Engineering. Photo: The Ford Mobile Office as seen at <http://jalopnik.com/tag/car-office?id=397200>

"Vigilance doesn't necessarily mean the absence of other stimulus," Lynch-Caris said, "it means you are able to continuously focus on the important task. You can be vigilant and multi-task at the same time. If the important task is driving and you also need to speak with a customer, making a phone call should be similar to talking with someone in the passenger seat. In other words, you need to be able to focus on driving while making the call and a good interface allows multi-tasking without detracting from the vigilance that is required to drive," she added.

I haven't tried this technology but it appears that drivers might not even feel the technology working while driving, said Lynch-Caris, pointing out that allowing your body to move keeps the blood flowing in your back. "Sitting still can be more fatiguing than movement since a healthy back needs continual blood flow. It would seem that in designing the seats in a car, the manufacturer would want to allow people to move while also providing postural support according to ergonomics research," she said.

Car designers have a particularly difficult time with seat design because they must meet the needs for long distance travelers as well as short term users along with varying body sizes and personal preferences. These different needs usually translate to different functional engineering specifications, said Lynch-Caris,

The reality is more people are in cars for longer periods of time and are doing more things in a car. While she is not advocating in favor of texting or other non-driving-related tasks while driving, Lynch-Caris recognizes the need to design interfaces



AMT's Vehicle Seat Multi-Position software is designed to reduce fatigue and improve comfort while driving by promoting healthy movement.

Dr. Lynch-Caris does
not advocate multi-
tasking while driving

that enable people to do what they are going to do anyway, but do it more safely. Let me emphasize that the most important task of the driver is to drive safely.

For more information about Comfort Motion Technologies, visit them on the web at <http://www.comfortmotiontechnologies.com/>.

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