

Driving into old age

October 4 2019, by David Bradley



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Worldwide the number of drivers over the age of 65 is increasing rapidly. As such, there is an urgency in the need to design vehicles that are ergonomically suited to this demographic to accommodate physical ailments and limitations that are usually not seen in younger people.

Research published in the *International Journal of Vehicle Design*, discusses the major ergonomic concerns of older [drivers](#) that might improve driving posture, improve attention, and decrease fatigue during driving. Ashish Dutta, A.K. Bhardwaj, and A.P.S. Rathore of the Malaviya National Institute of Technology, in Jaipur, India, have grouped ergonomic needs of older drivers into ten categories and then surveyed a number of such drivers. Three [important factors](#) emerged showing that concerns can be grouped into three areas: musculoskeletal factors, safety factors, and driver-[vehicle](#) interface factors.

Various vehicle features emerge as becoming increasingly useful, or even essential, to older drivers who want to continue to use their vehicles for as long as possible: [automatic transmission](#) that precludes the need for a clutch and gearstick, braking assistance, parking sensors and camera, voice-assistant navigation, antiglare mirrors and windows, intuitive and easy to read controls and gauges, easy ingress and egress, adjustable, heated, and massaging seats, remote-controlled doors and boot (trunk), augmented reality (heads-up) display technology. Many such features are already present as options in high-end vehicles and it is anticipated that such options will become ubiquitous as the market for older drivers matures. Of course, ever-present, is a future of self-driving vehicles that will preclude the need for many such [features](#), but never the need for a comfortable seat.

More information: Ashish Dutta et al. Ergonomic intervention in meeting the challenges of elderly drivers: identifying, prioritising and factorising the ergonomic attributes, *International Journal of Vehicle Design* (2019). [DOI: 10.1504/IJVD.2019.102336](https://doi.org/10.1504/IJVD.2019.102336)

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