Making Roads Safer for Seniors and Others

Feeling creaky? Eyes not what they used to be? The remedy could be as close as your garage.

Whether suffering from arthritis, weakening eyesight or diminished mobility, Canadians will increasingly have the ability to match their ailments to their cars as the transportation industry prepares for one of the biggest shifts in driving demographics on record.

In the next three years, the oldest Baby Boomers will turn 65. By 2015, for the first time in Canadian history, seniors will outnumber children younger than 15. By 2031, the number of elderly people in Canada will more than double to 9.1 million from 4.3 million, with seniors accounting for roughly one in four drivers.

Ongoing and proposed changes in everything from intersection layouts to vehicle ergonomics and licensing systems are being designed to keep both these greying drivers -- and those with whom they'll share the road -- safer.

"Generally, when you make things safer for older drivers, you make them safer for everybody," says Paul Boase, co-investigator for the Canadian Driving Initiative for Vehicular Safety in the Elderly at Transport Canada.

"Ten years ago, agencies were only thinking in terms of whether or not a driver was fit to be on the road," Boase says. "Now we're seeing a much larger look at the whole transportation process."

Automakers are literally putting their engineers in older people's orthopedic shoes to meet the Boomers' future driving needs. Both Ford and Nissan have their young designers don special ageing suits that simulate mobility and vision limitations through such contraptions as cataract goggles and flexibility-restricting body casts. However, manufacturers say their efforts aren't just for the older set.

"Nissan has no intention of building an elderly car," says Etushiro Watanabe, associate chief designer for the company. "The improved ergonomics benefit drivers of all age groups."

Many of the latest innovations designed to either soothe or prevent irritation of certain health conditions have been documented by the University of Florida's National Older Driver Research Center. In partnership with the American Automobile Association, it recently released a chart that matches drivers' woes with specific cars and their on-board modifications. For example, someone with diminished mobility could benefit from wide-angle mirrors, heated seats with lumbar support or the likes of Nissan's Around View mirror, which uses four wide-
angle cameras to show the driver any obstructions during parking and minimize the need for head turning when backing up.

A senior with vision limitations might seek out larger audio and climate controls with contrasting text or infrared night-vision cameras such as the ones seen on luxury cars from Mercedes-Benz and BMW.

The U. S. Federal Highway Administration has issued guidelines and recommendations for designing cities that better accommodate older drivers. The book addresses everything from intersection angles and lighting to traffic signal placement and street sign readability.

For example, a typeface called Clearview is said to make signs legible to elderly drivers from 16% further away -- and 12% for younger and middle-aged drivers. Other recommendations include protected left-hand turn signals (green arrows), better pavement markings at intersections, roads that intersect at an angle no less than 75 degrees, acceleration lanes for right turns onto high-speed roads and simpler road signs with sharply contrasting colours.

According to CanDRIVE, a national research organization focused on older drivers, statistics on seniors' road safety can be as flattering as they are damning to the demographic.

Canada's Traffic Injury Research Foundation shows that seniors account for the second largest proportion of road deaths, behind only 15-to 24-year-olds. Drivers aged 80 and older are at an even higher risk, with a fatality rate 1.5 times greater than that of teenagers. However, the high death and injury rates among seniors has more to do with their frailty than anything else. And, when you look at absolute collision rates, Canadians aged 55 to 70 have the lowest of any age group in the country.

The latter finding is credited to the fact that seniors operate vehicles far less frequently. Based on kilometres driven, the Canada Safety Council reports older drivers have more collisions than any other age group.

"Age, per se, does not cause crashes. In fact, healthy seniors are some of the safest on the road because they don't take risks and have lots of driving experience," says CanDRIVE executive Dr. Malcolm Man-Son-Hing, who specializes in geriatric medicine. "It's the development of medical and psychological conditions that causes the problem, and, of course, those are more common among older people."

In April, an 84-year-old woman lost control of her car and levelled an Ottawa bus shelter, killing a woman inside. Ottawa retiree Jean Hoganson is frustrated that high-profile incidents such as that are a flashpoint for sweeping condemnation of her generation's driving abilities.
"Every time an older person has an accident, there's this hue and cry to get them off the road," says Hoganson, 66. "Although there is a problem, there's a simple way to handle it."

Her solution is to leave the decision of who should and shouldn't drive to the vehicle operator's doctor and immediate family members. In most parts of Canada, the burden of reporting drivers who may be unsafe falls on doctors. The flaw in this system, according to the National Older Driver Research Centre, is that "there aren't any clinical tests that are definitively predictive of a person's ability to drive," making it unfair for doctors to bear such a responsibility.

The Insurance Bureau of Canada has recommended that the government legislate the driving allowances of older drivers who suffer from potentially hazardous medical conditions. One suggestion was to gradually de-licence people as their health changes.

Darren M. Scott, a McMaster University professor, says Baby Boomers will be resistant to hanging up their car keys. "People who are soon to retire have had access to cars all of their lives and are unlikely to give them up ... any time soon."

By Misty Harris, CanWest News

Courtesy: http://www.globalaging.org/health/world/2008/roads.htm