

## Making Cars Accessible To Disabled And Aging

*GM begins effort by making changes, such as wider-opening doors and latch sizes, that could have a big impact for some.*

By Jim Mateja

To most, the act of getting in the car, turning the key, and motoring away is taken for granted.

For 54 million people with disabilities and 76 million older than 50, such mundane acts can be arduous.

General Motors is trying to make life simpler for them.

Bill Love Joy, 61, GM's group vice president of sales and marketing, learned the problems older and disabled motorists deal with after his father-in-law suffered a stroke.

At Lovejoy's urging, GM formed a Mobility Center three years ago so engineers and designers can make such things as door/trunk openings and handle/knob/switch/dial placement and size more accessible to seniors and the disabled — as well as those with arthritis, bad backs and hip or knee replacements.

“When people are dependent on others, it's very frustrating,” Lovejoy said in an interview. “My father-in-law was paralyzed on one side. Just getting in a car was a feat. It caused me to start looking at things we could do.”

The mobility center formed a small “paragon” group, employees who conducted consumer research clinics to learn what changes they wanted in vehicles.

“The first impact we made was on the current minivan [Chevrolet Venture], which has the widest side door van opening [32 inches] in the industry. The paragon group said it had to be wide for those with crutches or to load a wheelchair,” he said. Venture's side door opening is 2 inches wider than

a Honda Odyssey and 4 inches wider than a Ford Windstar.

Thanks to the paragon group, GM also found a customizer that could equip the van passenger seat to pivot toward the door and extend out and down for entry and exit. And GM dealers can do the work so consumers don't have to hunt for an aftermarket supplier.

For now the paragon group is focusing on getting in and out of the vehicle.

The first car to benefit is the '04 Pontiac Grand Prix, which is being redesigned for that year.

“The doors will open 81 degrees versus the normal 68- to 70-degree openings we have now,” Lovejoy said.

So why not do that to all doors on all vehicles? “We have to find the sweet spot because the issue becomes how far can a door open before the motorist can't reach it to shut it,” he said.

Other clinics have focused on where to put power-seat controls for easiest access and what instrument panel background color — red, orange, white, blue or green — makes the letters and numbers easiest to see.

“We learned everyone wants a different color,” Lovejoy laughed, though the failure to agree on one color proved to be a valuable lesson.

“Why not be able to hit a button to change the color to the one of your own choosing.

For the 30-year-old, [mobility] is no big deal. But for those over 50, it drives the purchase decision. We've never had a 30-year-old jump through the van door and complain it was too easy to enter, but when you make it better for the 50-year-old or the disabled, you make it better for the 30-year-old or those not disabled without them realizing it,” Lovejoy said.