## Internet cars enter superhighway

Three times in recent days, I've been in 'the car of the future. A few weeks back, it was a Buick LeSabre that steered itself around a parking lot where magnets had been buried every few inches to create something of a test track. That was, to say the least, an experience that felt surreal, unnatural.

Before that, I was in a Cadillac Deville with General Motors' Onstar system. Using computers, a cellular phone and a global positioning satellite, Onstar enabled an operator in Michigan to lock and unlock the car's door, honk the horn and flash the lights. For good measure, the operator told me where the nearest ATM was, how far I was from the hospital and even that I was parked in front of a tiny momand-pop Japanese restaurant.

Big Brother? Oh, brother. This week, as I sat in a silver Mercedes- Benz E420 in a Palo Alto parking lot, I realized that driving as we know it, is coming to an end.

Rather than start, stop or steer itself, or have its horn honked from afar, this car offered a far scarier proposition: the ability to be in total contact with the world, right here, right now and forever more.

Work is in progress at the Daimler-Benz Research and Technology Center, where the car offers 'real-time' Internet access. You might think that means a Matt Nauman chance to grab a stock quote or a sports score while you waste time in traffic. That's right but it hardly grasps the big picture.

You can run a meeting, type a memo, finish a multimedia presentation. You can send and get e- mail. With help from increasingly sophisticated traffic sensors in the Bay Area, you can avoid construction, accidents and other every day traffic snarls. The system, which has one flat screen in front for the driver and front-seat passenger, and two more in back, includes video games, a navigation system, wireless headphones and a keyboard.

Electronic organizers or personal digital assistants are easily attached, so you can bring work into the car and easily access phone numbers or bookmarked Web addresses.

As demonstrated by Daimler- Benz engineers Akhtar Jameel and Axel Fuchs, the

car becomes another device, an appliance that enables you to stay in contact in a seamless manner from office to car to home.

This Web-friendly car takes the concept of an office on wheels to its ultimate conclusion.

Fuchs also demonstrated another Daimler-Benz project, a handheld computer, called a personal travel companion, that includes a wireless phone line. It allows someone to get up-to-the-minute traffic information, train and plane schedules and even assists in route planning. Awaiting the appropriate handheld PC, the system currently uses Sony's Magic Link box. Traffic information comes from TravInfo, the Bay Area's new traffic information system. All these things also will accessible in the car of the future. Of course, tons of issues remain unsettled like:

**Cost**: Will enough people 'need' this technology to make it cost-effective? And, sure, this might be it is coming to an end affordable to the owner of a US\$50,000 Mercedes, but what about someone in a US\$12,000 Ford Escort? Paul Mehring, president and chief executive officer of the re- search center, wouldn't even guess what the system would cost. He did say that Mercedes is giving serious study as to when and what car will be the first to go on-line.

**Technology** Daimler-Benz's demonstration car has all sorts of off-the-shelf components, with a trunk and a rear shelf filled with computers, modems and wires. The promise is that smaller, more durable equipment is coming-soon. Will it?

**Safety**: If cell phones and Big Macs constitute a road hazard, what are the consequences of being able to call up a photo of the 'Baywatch' guys and gals, or watching your high-tech portfolio fall 30% as you drive?

**Privacy** if another computer can unlock your doors, know your precise location and see how fast you're going, wouldn't cybercrooks or the cops like this information, too?

Sanity: How much is enough?

If 80-hour work weeks take their toll, what about a world where there is absolutely no downtime? Zero?

Although many of these applications are five to 10 years from actually appearing

in a production car, the Daimler-Benz Webmobile shows the company made a smart decision when it opened an office in the Silicon Valley 18 months ago. This car reflects coordination with area firms such as Fastline and Trimble.